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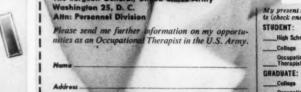
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THE APPLICATION OF THE OVERLOAD PRINCIPLE TO THE LEARNING OF MOTOR SKILL*

C. ETTA WALTERS, PH. D.**

INTRODUCTION

The method of developing muscular strength and cardio-respiratory endurance is a well known example of the use of a fundamental biological principle; e.g., subjecting that which is to be developed to stress within tolerable limits. Muscular strength cannot be developed by carrying light indefatigable loads over a long period of time, nor can it be developed simply by having the will to do so. In either case the appropriate stimulation to the muscle must be a resistance so heavy that fatigue is induced in a relatively short period of time, or the muscle must be exercised at a speed which produces fatigue. In developing strength, this is known as the "Overload Principle."

Steinhaus in the "Chronic Effects of Exercise" reviews the work of many early investigators who demonstrated the overload principle in developing muscular strength and cardio-respiratory endurance. The work of Siebert and Herxheimer are examples of such a demonstration.

Experience has demonstrated that practice by itself does not "make perfect," and as Bartlett² has aptly phrased it "it is practice the results of which are known that make perfect." In another discourse on the development of skill² he says, "And such graded action, however simple it may be, has at least one of the fundamental marks of skill-an effector response is not merely set off by a receptor function but is guided and determined by it. The receptor functions that are important in the case of skilled behaviour are always of that kind which claims to register something that is going on in the outside world. So they come to be particularly identified with the operations of the special senses, and especially of those distance receptors which are the basis of tremendous development of the central nervous system. Skill then, whether bodily or mental, has from the beginning this character of being in touch with demands which

come from the outside world." Adrian¹ emphasizes the same view and says "purposive acts, therefore, must be moulded like the movements of walking, by the controlling afferent patterns which are set up as the act progresses." Sherrington has reminded us many times of the importance of the distance receptivity and locomotion and has stressed the correlation of the two.

Few studies on the learning of a motor skill have been performed specifically with the purpose of determining the effect of stress† on learning. The overload principle has been inherent, however, in many studies and in many current practices in the development of a skilled activity. The setting of a higher goal and the solving of a new problem are examples of the use of this principle.

When time and money are of the utmost importance to the patient and time short with the therapist, it is important to obtain results quickly and methods which can expedite recovery should be sought and used.

The purpose of this paper is to demonstrate experimentally that for the greatest development of a skilled act, it is necessary to stress the learner during practice periods in the skill which he is learning.

PROCEDURE

Description of test. The Minnesota Rate of Manipulation test consists of placing sixty cylindrical blocks, approximately one and one-half inches in diameter, in holes in a board, the holes being slightly larger than the blocks. The score is the time that it takes to place the blocks perfectly in the holes.

^{*}Supported in part by United Cerebral Palsy, Chicago.

^{**}Research Associate, Department of Physical Medicine and Rehabilitation, Research and Educational Hospitals of the University of Illinois, Chicago, Illinois.

[†]Stress is referred to here and in other parts of the paper as forced learning within tolerable limits.

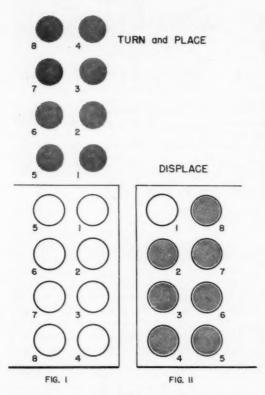


Figure 1 and Figure 2. The Two Tests of the Minnesota Rate of Manipulation Test (See text for discussion)

The Turn and Place Test and the Displace Test of the Minnesota Rate of Manipulation Test were used. The subjects performed them in a sitting position. All subjects were tested individually and by the same person. They were given a demonstration of four rows by the observer, and one complete timed practice. If the subject did not perform the test correctly during the practice, she was given another practice to be sure that she understood and could execute the test properly. Two timed trials were then given for each test. Subjects were tested first on both activities with their preferred hand, and then with their non-preferred hand.

The Turn and Place Test (Fig. 1) involves reaching with one hand for block 1, picking it up, turning it and placing it in space 1. The numbers indicate the order of picking up and placing the blocks in the holes.

Figure 2 shows the order of sequence of the Displace Test. Block 1 is picked up and put in the empty space marked 1, block 2 is placed in the empty space left by block 1, and the remaining blocks follow in the order indicated in Figure 2.

Subjects. Eighteen women, ranging in ages from nineteen to fifty-seven years, were subjects. Two were nineteen years old, two were in the fifty year old age group, and the average age of the remaining fourteen was thirty-two years.

All except four subjects were in the eightieth percentile or above on the norms established for the Minnesota Rate of Manipulation Test, and none of the subjects was below the eightieth in both tests. Twelve subjects placed in the ninetieth percentile or above in the Turn and Place Test and twelve were in the ninetieth or above in the Displace Test. All subjects worked either in the physical therapy or occupational therapy department, and as indicated by the percentile placement of the subjects, were adept with their hands.

Training. All subjects practiced with their preferred hand. The right hand was the preferred one for all individuals except one.

Each subject was given four trials of each test, five days a week, and was tested once weekly, two trials each, on both tests with her preferred hand. At the end of the fourth week she was tested on both the preferred and the non-preferred hand. All practices and tests were administered by the same person. All groups were highly motivated; and progress, to sustain interest consistently at high levels, was graphed daily. Inter-group competition was excellent, as well as the drive to improve self performance.

Groupings. Subjects were equated in initial performance on both tests with their preferred hand and in age, and were placed in four groups; e.g., three experimental groups who trained in a stressful performance, and one control group that trained in a low speed, non-stressful performance.

- 1. Control (Paced Non-Stressful). Four subjects were in this group. They trained to a set rhythm of a metronome at a speed twelve per cent slower than their initial performance.
- 2. Experimental (Stressed): Paced. Five subjects were in this group and practiced to a set rhythm of a metronome at a speed initially twelve per cent slower than their first test performance. The speed was increased progressively each day if the four trials of each activity could be performed below a predetermined number of errors (ten or less for four trials of the Turn and Place Test and five or less for four trials of the Displace Test.
- 3. Experimental (Stressed): Self-Paced. Four people were in this group and practiced at their own pace with each trial having to be a perfect performance; e.g., all errors were corrected. Dur-

ing this time they were urged to surpass each practice trial.

4. Experimental (Stressed): Self-Paced (without regard for accuracy). Five people were in this group and trained for two weeks with selfpacing on speed. They were to try to place the blocks correctly in the hole, but were not to correct errors, and were to place speed before accuracy.

At the end of two weeks, they practiced with a metronome in the method described for the paced stressed group, with the exception that they were allowed ten errors per trial in the Turn and Place Test and five per trial in the Displace Test.

RESULTS AND THEIR INTERPRETATION

All test scores were computed as per cent improvement in time over initial performance and

learning curves were constructed.

Comparison of Experimental and Control Groups in Turn and Place. When the composite learning curve (Fig. 3) of the experimental groups in the Turn and Place Test is compared to that of the control group, the differences in improvement are shown in favor of the experimental group each week of testing. At the end of four weeks of training the control group, practicing in a non-stressful performance, gained only as much as the experimental groups did at the end of the first week of training.

The question may be posed as to why the control group improved at all. The answer, while speculative, could be due to improved methods of practice and to a slight accumulative practice effect from having executed the act at a higher speed the previous test day.

From Table 1 it is apparent that there is not much difference in the weekly mean improvement of each experimental group.

Table 3 shows the greatest improvement any subject in the control group made in the Turn and Place Test was less than the smallest improvement made by any one person in the experimental group.

Comparison of Experimental and Control Groups in Displace. A comparison of the learning curves in the Displace Test (Fig. 4) shows a higher per cent improvement in favor of the experimental group. Although there is a variation of only two per cent in the two curves at the end of the first week, the control group has improved only two per cent more at the end of the fourth week, while the experimental group has improved an additional fifteen per cent.

From Table 4 the greatest improvement made by any subject in the control group is shown to be surpassed by all but two subjects in the experimental groups. The large per cent improvement of the one subject in the control group

TURN and PLACE TEST (MINNESOTA RATE of MANIPULATION)

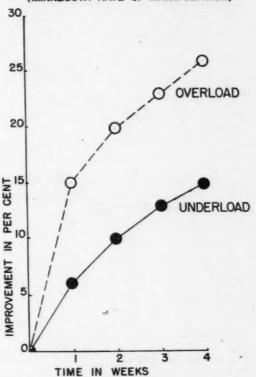
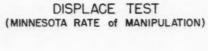


Figure 3. Weekly Test Improvement in Per Cent of Experimental Groups Working under Stress and Control Group under Non-Stress

could possibly be attributed to "experimental error" as it is likely that a true baseline may not have been obtained for that subject in the Displace Test. That the other three subjects all improved by the same amount perhaps might also be due to "experimental error." However when one considers the simplicity of the Displace Test and the great amount of repetitive practice in an "experimental vacuum" it is not surprising that there are no variations in learning. It has been postulated that subjecting individuals to wide experiences and opportunities for learning will tend to make people more dissimilar than

DISCUSSION

The Turn and Place Test appeared to be a more complex skill than the Displace Test, and seemed to involve greater finger dexterity, better coordination, and more visual acuity. The control group practicing in underload made its greatest improvement in the first week in this test. After that improvement was negligible. The self-paced group could push itself seventeen per cent over their initial test performance in the Displace Test, and only ten per cent in the



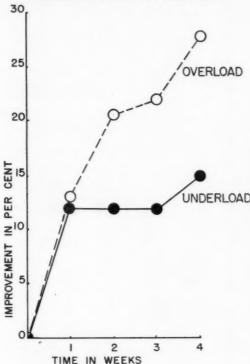


Figure 4. Weekly Test Improvement in Per Cent of Experimental Groups Working under Stress and Control Groups under Non-Stress

Turn and Place Test (Tables 1 and 2).

In a comparison of the gains of the preferred and non-preferred hand (data to be published), the results showed the experimental groups gained as much by indirect training as the control group did by direct training.

All experimental groups were stressed in some way in learning both activities. The self-paced group was highly motivated and during practice forced itself to perform the activities faster each day. The paced group, although starting in a non-stressful performance, was practicing in stress by the end of the first week. Pacing with a metronome involved reaction to an outside stimulus, and was perhaps, even in the first few days of practice at a slow speed, a stress situation. The self-paced (without regard for accuracy) group was constantly stressed in speed, and when they changed to practice with the metronome, their actual practice in speed decreased over their unpaced practice. When they attempted to seat the block to the rhythm of the metronome, they could not go at as fast a rate as when they practiced unpaced. They were,

therefore, training with a greater stress on accuracy than in the unpaced practice.

Lashley in his lecture on "Mass Action in Cerebral Function" sums up beautifully the possible role of the central nervous system in motor learning. Briefly it is this. The afferent projection fibers transmit their excitation to various parts of the cortex and, in at least vision, kinesthesis and touch, leave with the cortex something of the "special attributes" of the stimulus. The adequate stimulus is not an activation of a specific group of cells, but an excitation that may shift over both the sensory surface and the cortical field. The only constant factors determining the chemical or electrical response with the system seem to be the intensity, distance of separation and frequency of excitations. This excitation produces an interference pattern in an otherwise fairly homogeneous matrix." The interference pattern could influence a specific group of efferent cells or could, through altering the general polarization of the lower centers, modify their functional activity. The activity of the nervous centers is conditioned by many factors and various threshold and sub-threshold centers of tonic activity are maintained through excitation from many sources. Thus each part of the cortex exerts a mutual influence on other parts and also on some of the lower centers which all cortical areas supply in common.

Sherrington¹⁰ says, "Although trains of impulses are the sole reactions which enter and leave the central nervous system, nervous impulses are not the sole reactions functioning within that system. States of excitation which can sum together, and states of inhibition which can sum together, and states which represent the algebraical summation of the two, are among the central reactions" . . . "The motoneurone lies at a focus of interplay of these reactions . . ." He reminds us in another lecture¹⁰ of the fact that no skill was ever learned unaccompanied by sensory-motor experience.

In a skilled movement there are many structures that participate without actually determining its specific pattern. In a simple activity, or in one produced under little or no stress to the individual, the high threshold states, no doubt, are never activated. Under stress and emergency states, the high threshold states are excited, and the excitation of all centers of the cortex, mutually excite and facilitate each other, and perhaps bring voluntarily into play the subcortical centers, all of which contribute to a more purposeful response.

Walshe¹² in his discussion on willed movement says, "The willed movement, the 'pre-current' reaction as it so commonly is at its start, is not characteristically predetermined in form, dura-

TABLE 1 WEEKLY PER CENT IMPROVEMENT OVER INITIAL SCORES IN TURN AND PLACE

				We	eks				
Groups		1	. :	2	3		1	4	
	P*	I*	P	1	P	I	. P		1
Control	0	6	0	10	0	13	0		15
Experimental									
Paced Stressed	8	16	15	19	20	22	23	. 4	24
Self-Paced	10	15	19	20	21	23	25	40	28
Self-Paced(No regard for accuracy)	26	15	33	22	26	23	30		26

*P = Per cent pushed over initial speed
*I = Per cent improvement over initial speed

TABLE 2 WEEKLY PER CENT IMPROVEMENT OVER INITIAL SCORES IN DISPLACE

				We	eks			
Groups	1		2		3		4	
	P*	I*	P	I	P	1	P	I
Control	0	12	0	12	0	12	0	14
Experimental								
Paced Stressed	7	11	13	18	17	21	22	24
Self-Paced	17	18	23	26	24	24	29	33
(No regard for accuracy)	30	11	37	18	30	22	33	28

*P = Per cent pushed over initial speed
*I = Per cent improvement over initial speed

TABLE 3 PER CENT IMPROVEMENT AT THE END OF FOUR WEEKS AND INITIAL RAW SCORES IN TURN AND PLACE

Control				Experim	ental	Self-	Paced
		Paced Str	essed	Self-Pa	ced		for accuracy)
I.R.S.*	1*	I.R.S.	I.	I.R.S.	I	I.R.S.	I.
68	18	73	37	69	27	78	19
66	15	70	20	66	31	65	29
64	9	64	23	66	26	64	34
62	18	64	22	62	28	63	21
		63	20			63	29

*I.R.S. = Initial Raw Score

I. = Improvement

TABLE 4 INITIAL RAW SCORES AND PER CENT IMPROVEMENT AT THE END OF FOUR WEEKS IN DISPLACE

Contre	ol			Experime	ental		
		Paced Str	essed	Self-Pa	ced		Paced for accuracy)
I.R.S.*	1*	I.R.S.	1.	I.R.S.	I	I.R.S.	I.
45	12	44	25	44	33	44	34
44	21	43	17	43	37	42	20
43	12	43	28	40	27	42	31
39	12	42	24	39	34	40	29
		41	28			40	26

*I.R.S. = Initial Raw Score

I. = Improvement

AJOT X. 1, 1956

tion or complexity, for it is moulded throughout its course by impulses deriving from the visual, extero-receptors and proprio-receptors . . . It would seem, therefore, that we may look upon the pyramidal system as an internuncial, a common pathway by which the sensory system initiates and continuously directs, in willed movements, the activities of the nervous motor mechanisms. This sensory influx is a condition of willed movement, and unless we consider both in association we cannot hope to see the purpose of either."

Gellhorn and his co-workers⁴ have shown the importance of proprioception on cortically induced movements, and have demonstrated the facilitatory effect of proprioceptive impulses.

No discourse on the physiology of motor learning, no matter how brief, would be complete without beginning or ending with Coghill³. It is to his work that we owe the theory that behavior develops as a mass action response and individuation of partial patterns grows out of this total patterning; the partial pattern, however, never breaking its connection from the primordial response. During stress, there is a reverting back to the total action response and primitive, subcortical patterns are elicited.

SUMMARY AND CONCLUSIONS

The effect of stress on the learning of two sensory motor skills was studied on eighteen women. They were equated by initial performance and age and divided into four groups; three experimental who trained in some form of a stressful performance, and one control who trained in non-stressful activity. All groups practiced four trials each test, five days a week, for four weeks.

The subjects of the experiment were highly skilled, and it might possibly be expected that the gains they made could be multiplied several times for the poorly skilled or disabled patient. The number of subjects was also small. However an analysis of the learning curves indicates a trend toward the following conclusions which would be applicable to similar groups.

- A greater degree of skill can be attained by practicing under stress than in a non-stressful situation.
- 2. As much can be gained by indirect training under stress as by direct training under non-stress.
- In highly motivated groups self-pacing is as effective in learning as pacing to an outside stimulus.

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Appreciation is extended to Dr. F. A. Hellebrandt for her guidance and to the subjects who gave so willingly of their time and effort.

AVAILABLE MANUAL

A copy of the testing manual, The Illinois Laterality Battery, which is the battery of tests developed by the research described in the article by Antje Price in the November-December, 1954, issue of AJOT, is available. It contains general instructions for administering the tests, a description of each test, methods of obtaining additional information, a guide to interpretation of results, a sample test and record form and a gauge for scoring the Tracing Test. You may obtain a copy of the manual by sending \$1.00 or an institutional billing form to:

Miss Antje Price, O.T.R. 509 West Oakdale Chicago 14, Illinois

The National Society for Crippled Children and the International Council for Exceptional Children have listed the article and the test. Although sales to occupational therapists have been slow, requests have come from five institutions, four physical therapists, three doctors, one psychologist and one library. Miss Price also informs us that she has sent two to Africa and one each to Argentina, Canada and England.

TYPEWRITER FRAME AND MOUTHSTICK FOR THE QUADRIPLEGIC WITH NECK INVOLVEMENT*

ANN D. BASTABLE, O.T.R.

When we review the field of physical disabilities, the typewriter appears as a universally favored mode of treatment. Aside from the educational and prevocational aspects, the occupational therapist knows that typing is a highly repetitive activity which can be graded according to muscle strength, endurance and coordination. The therapist is also aware of the problems involved in presenting this machine to the disabled patient who must sometimes be in very awkward working positions. He may be semi-reclined in a wooden wheelchair, lying face down on a cart or even enveloped in a chest respirator. Unfortunately the therapist is often forced to solve this

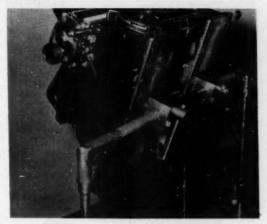


Pipe typewriter frame with the keyboard in level poition.

problem with a number of makeshift tables or hastily constructed devices.

While working with a group of severely involved respiratory poliomyelitis patients requiring the heavy electric typewriter it became obvious that such makeshift solutions would not be acceptable. A pipe frame was developed to solve the problem of poor positioning and provide safety for the patient and therapist. The typewriter remains bolted to the frame and can be wheeled over the patient with the machine secured in any position.

This frame has two main adjustments. First, it can be lowered to approximately twenty-eight inches from the floor for manual typing in a wheelchair. It can be raised to approximately thirty-four inches for typing with a mouthstick. The second adjustment provides for tilting the keyboard a full 360 degrees. This is a feature originally designed to enable the quadriplegic



Close-up showing clamps which provide for rotation of the machine.

patient with poor to zero back and neck muscles to achieve mouthstick typing. It is, of course, impossible for such a patient to type with the keyboard in the horizontal position.

The frame was constructed of three-quarter inch galvanized pipe and welded in the hospital maintenance department. The typewriter is bolted to a metal plate which has two clamps welded on the underside. These unique clamps fasten



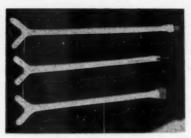
The pipe typewriter frame is wheeled over the semireclined wheelchair. The patient is typing with a mouthstick utilizing the tilted keyboard position of the frame.

to the top crossbar and probice for rotation of the machine. The frame is mounted on four swivel type casters with two-inch rubber wheels allowing for maximum maneuverability. The casters are welded to the pipe legs.

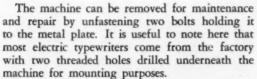
*From the University of Illinois Respiratory Center, Chicago, Illinois. The Center was established by a grant from the National Foundation for Infantile Paralysis.



Patient utilizing same rack and stick for painting.



White plastic mouthsticks prepared for typing, painting and page turning. Note the Y shape of the mouth-piece which allows maneuvering by tongue and lips without its falling out of the month.



It is felt that this frame idea might be utilized for the treatment of many types of physical disabilities as well as for patients who must type in a reclining position. The frame pictured was made to fit over the standard wheelchair used on one ward. In this instance, the twenty-eight inches of clear space between the two side uprights just clear the hand rims of the chair. It could easily be constructed wider to accommodate larger wheelchairs or carts.

The Y-shaped plastic mouthstick used in conjunction with the tilted keyboard has enabled patients with poor neck muscles to type independently. The shape of the mouthpiece allows the stick to be maneuvered by opening and closing the lips. The two back projections of the Y rest on the upper molars and the stick is balanced on the lower lip when the mouth is open. The stick will not fall out of the mouth but can be pushed out by the tongue. The center of the Y shape provides a natural spot for the tongue to



Heavy line indicates shape of mouthstick in relation to the wax impression of the patient's bite.



Patient utilizing reading rack for independent reading. Pages are turned with plastic mouthstick.

push against. When typing, turning pages or painting, pressure can be applied at the end of the stick by pushing with the tongue rather than by neck action.

Each patient usually acquires three or four mouthsticks. For typing a one-and-a-half inch length of 3/16th inch rubber surgical tubing is slit length wise and taped around the tip of the stick. The rubber can be trimmed to fit the type-writer key. A one-half inch square of natural rubber sponge is taped to the stick for turning the pages of a book. Paint brushes, charcoal pencils, etc., are also taped to the shaft of the stick.

The patient is first introduced to the mouthstick while learning to turn the pages of a book on a bookrack. With the physician's approval this activity can be started early. As soon as the respiratory patient is comfortable using a chest respirator in bed or while using the rocking bed, a bookrack can be clamped to the bed. Early use of the neck muscles is then encouraged via the mouthstick. This process of muscle re-

(Continued on page 12)

WHAT IS REALISM IN OCCUPATIONAL THERAPY

BEATRICE FIELDS*

One of the major questions a therapist needs to ask himself is whether the selection of a modality for use in treatment is based on his own personality needs or upon an objective and realistic evaluation of the patient, the goals and the environment in which the patient is to function. One therapist may cling to traditional materials, another may rush into new media, discarding the old without being selective, and as a result limit the flexibility necessary, if occupational therapy is to remain an effective form of treatment in rehabilitation. His own insecurity and rigidity, or his flexibility and imagination determine in large measure whether or not the very term "realistic approach" has been applied objectively or with that measure of subjectivity that colors thinking unless constantly checked by self-evaluation.

Too frequently the term "realistic approach" in rehabilitation today is based less upon man and his needs, than upon the industrial society in which he lives. The premise appears to be that since man is living in an industrial age, rehabilitation tools in occupational therapy should include a preponderance of industrial media, while relegating arts and crafts mainly to the habilitation or rehabilitation of children. The evaluation of the environment is a realistic one, but it is man who is being treated and not the environment.

Webster defines the term "realistic" as concerned with things as they are, as distinguished from the abstract and speculative. This proposes a problem for the philosophers, but for the moment it may be accepted at face value. Since we are concerned with man, are we dealing with him merely as another industrial tool to be repaired, or are we dealing with man whose subjective self is, to him, as real as the objective self and who must function with, and in spite of. the machine? There can scarcely be any disagreement that the realistic concept would be the latter. If this is true, can there be a preponderance of one type of media over another? "If occupational therapy is to improve its services to rehabilitation, it must use industrial media as freely as arts and crafts, and select the proper task from its armamentarium thus augmented . . . They should not be used routinely but only when consistent with the vocational, psychological and functional demands of a case." If so sound an approach to therapy as the one stated above is to be more than verbal acquiescence, then man must have access to those tools that supply the needs of the subjective self in the rehabilitation of the objective self, if he is to

function adequately as a patient and as a wage earner.

The need to create is inherent in man. Primitive people painted their caves, the worker sang with his tasks, the builder in the middle ages created his churches with loving craftsmanship and pride in achievement. In an age where the machine removes him from a personal relationship to the product he is to create, his satisfaction must come from some other source. In our mechanized civilization it is not mere chance that a greater number of individuals have shown interest in the creative arts, including music, in an effort to find substitute satisfaction and a means of creative expression that was formerly found in daily work.

It should therefore not appear paradoxical in this industrial society that so non-industrial a medium as music is a growing therapeutic infant of the second world war. Although it is too often applied with enthusiasm rather than knowledge, enough information is slowly emerging to warrant its consideration for use in therapy. It may stand alone, but in any event, its inclusion in occupational therapy as a treatment modality rather than as a recreational activity is not to be ignored, even on realistic grounds.

Only in recent years has realistic thinking entered into industrial thinking by showing concern for man as a total human being. It would be unfortunate for occupational therapy if, in reducing the use of arts and crafts, its practice becomes dated rather than aligned with the times, even though equipment in a rehabilitation center appears to be of the most modern kind.

Norbert Weiner, whose creation of cybernetics has contributed toward a second industrial revolution, gives serious thought to man's place in this era, and writes: "The industrial revolution is a two edged sword . . . I have been delighted to see the awareness of a great many members of management to the social dangers of our new technology, and the social obligation of those responsible for management to see that the new modalities are used for the benefit of man and enriching his spiritual life, rather than for profit and the worship of the machine as a brazen calf."²

Patients have rebelled against industrial media as well as arts and crafts, but if rebellion is to be the criterion for eliminating media, rather than a critical selectivity based on examination of all

^{*}Formerly director of music therapy at the Institute for the Crippled and Disabled, New York City.

factors that prompted their rejection, then limitation rather than augmentation of selection will be the result. Too often the patient feels himself to be in such a tenuous position in relation to the therapist and so anxious to be accepted, that he shows no overt rebellion to anything offered him as long as he has an opportunity to do something. Lest the therapist be lulled into the security of believing a modality to be adequate, merely because the patient is submissive, it is well worth the time to explore with him those facets of his personality that will give some clue to his total needs, as well as evaluation of the limitations in range of motion, coordination or any impairment interfering with function.

Certainly weaving may be no medium for a logger or coal miner, but it does not necessarily follow that a patient can be more successfully treated by a tool related to his vocation. A musician may resent using music, particularly if there is to be a permanent impairment. Kitchen equipment or the ironing board may be no answer to a housewife whose disability has temporarily freed her from hated tasks. A patient's attitude toward any modality is determined in part by his own psychological needs and to some degree by the attitude of the therapist with whom he works.

Musicians have been known to wreck a piano when they found that they could never play again. The writer is acquainted with a conductor whose favorite recreational activity is repairing diesel engines. On the other hand, a right hemiplegia who had been a concert pianist, did not resist retraining through the use of music when she found that no effort would be made to teach her to "play again." This patient was so depressed that her one apparent wish was to die. The occupational therapist could elicit no interest in anything. When music was mentioned, she justifiably resented the idea. Nevertheless, she was seen by the music clinician who listened to her expressions of despair, and as the patient talked, the therapist began to play the Chopin Funeral March very badly, on the piano. Musical temperament asserted itself. The patient became vehement about the phrasing and how it should be done, stating that the music was being "murdered." Then she insisted upon teaching the therapist. In doing so, she began using her arm, and revising her conviction that death was the only solution to her problems. Motor coordination was permanently impaired for fine motion, but the possible gross motion could have gradually been applied to another activity had she remained long enough to be returned to the occupational therapist.

In a large rehabilitation center a patient was

seen sitting near a table in a position to exercise the shoulder girdle, by having sand paper on a block of wood tied to her arm in order to sandpaper another piece of wood placed on the table. She moved the arm backward and forward in relentless monotony, performing a task with a look of desperation on her face, and showing no interest in what she was doing. The goal was too remote from the immediate experience for any satisfaction. Opportunity for the anxiety that often comes with boredom was one concomitant of such an activity. An exacting price was being paid for increased use of the trapezius and associated muscles.

These examples are not intended to convey the idea that music is a better modality than others, but merely serve to indicate that generalizations are not effective in specific application, as Gordon and Wellerson¹ have pointed out. However, unless the shift to a preponderance of industrial media is more than a substitution of one kind of uncritical practice for another, it is as ineffectual in meeting the psychological, functional and vocational demands of the case as is an uncritical use of arts and crafts, even though the transfer of emphasis appears to be justified on realistic grounds.

To expand the media for use in occupational therapy in keeping with expanding knowledge and rehabilitation needs is necessary if tools are to remain flexible enough to meet changing conditions, but it is necessary to be certain that the expansion is based on an accurate evaluation of the term "realistic." Such an evaluation or reevaluation is a contribution to be made by therapists. Schools may prepare them for the necessary flexible attitudes, but imagination in the application of a modality cannot be taught. Nor can any school of occupational therapy teach the wide variety of skills in many specialized fields including industrial fields. Rather than feel concern over non-accredited therapists coming into the field, why not train occupational therapists to welcome and be able to direct from a medically oriented point of view, any of the skills placed at their disposal that may contribute to the treatment of the patient?

Rehabilitation is becoming so inclusive that the next member of the treatment team may well be the industrial plant itself. The final training in the application of a reestablished use of an extremity to a man's vocation will perhaps eventually take place right in the industry or factory where he is employed, under the guidance of trained therapists, as no rehabilitation center can duplicate the wide variety of factory equipment or work conditions. But a rehabilitation center can offer more in the way of motivation.

EXTENSOR THRUST RESTRAINT FOR THE CEREBRAL PALSIED

EDWARD L. BINKLEY, JR., M.D. ALICE HILL, O.T.R.

CHILDREN'S HOSPITAL DENVER, COLORADO



Patient (5 years, diagnosis—tension athetoid) before application of restraint.

A major problem of therapists, teachers, and parents working with the cerebral palsied patient is the presence of the "opisthotonus," or exaggerated extensor thrust, in some of the more involved athetoid and rigidity types.

Opisthotonus¹ (posture) is an uncommon dorsal position in which the body rests upon the head and heels, with the trunk arched upward. The primary dysfunction is an inability to gain sitting balance, since the patient goes into varying degrees of body hyper-extension, particularly involving the neck, trunk and hips. The thrust is accompanied by increased amounts of body tension, many times resulting in a jaw thrust as well. Any purposeful use of the hands and arms is often impossible since the thrust forces the arms and legs into extension with tension over-flow.

The thrust disappears upon relaxation, or it can be broken by means of physical force or mechanical apparatus, such as bracing. The patient may be forced to a sitting position by "bucketing him," with resultant hip and neck flexion. The hips must be flexed to at least a 90-degree angle, and in some severe cases, to a lesser one. Once the thrust is broken, and maintained at that position, the patient is generally more relaxed, and improvement is seen in voluntary control of affected parts of the upper extremity.

The most logical solution is long-leg braces with a pelvic band which have been adapted

with hip locks at a right-angle for sitting purposes.

Our restraint was designed primarily for the patient who is not yet braced, due to age, an orthopedic complication, or other factors. It was virtually impossible to gain any purposeful hand motion in some of the more severely involved children since the opisthotonus was so intense.



Extensor thrust restraint applied.

It has been necessary to use the restraint on some children in braces without hip-locks.

It must be pointed out, that unless fitted and worn properly, the restraint will prove unsatisfactory, since the hips must be flexed to that point where the thrust is broken. An "in-between" position will only enforce it. One must also pay special regard to the position of the hips, since there could be some danger of subluxation or aggravation of an already dislocated joint. Our experience here has been negative in this respect. For this reason, the thigh bands are fastened and drawn up to the chest band from the inside—which tends to externally rotate the hips.

The restraint is simple to assemble and inexpensive.

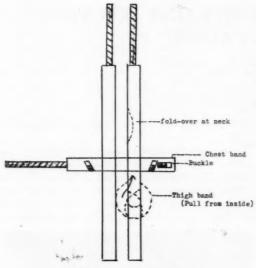


Diagram of Extensor Restraint

Materials:

- 1. Cotton webbing—two-inch width for chest and thigh bands)
- Cotton webbing—one-inch width (for straps to fasten)
- 3. Buckles²—one-inch; 2-prong; preferably with safety clasps

Procedure:

1. Chest band (one piece)

Measure chest circumference not binding, but snug. Allow about two inches for over-lap on which to attach buckle and strap. Chest band fastens in the back and must be worn high, directly under the arm pits to maintain desired hip flexion—since thigh bands attach to it. A buckle sewn on a three inch piece of cotton webbing (one-inch) is attached to one side. A ten-inch length of webbing is attached to the other side for the strap.

2. Thigh bands (two-pieces)

The thigh bands should be measured separately for each leg. Start band at thigh (measurement will be circumference of mid-thigh plus allowance for slipping over shoe). Temporarily pin around thigh, (to be stitched securely later), and continue from inside of thigh up. Flex hip to desired angle, where thrust is broken, and then attach thigh band firmly to chest band to maintain angle by pinning (to be stitched securely later). Continue thigh band over shoulder, crossing in back, and attach to thigh band in back, as described before. To attach to chest band in back, a ten-inch piece of webbing (one-inch) is sewn onto band and will fasten with buckle that is attached to chest band diagonally. Repeat process for other thigh.

When all three buckles are fastened, hips must be held at right angles, or less if indicated. If hips extend or thrust is still present, either shorten the distance of the thigh bands to the chest band, or fasten the chest band higher under the arm-pits, then re-fasten shoulder straps. If the neck area becomes irritated, it can be relieved by folding the webbing over and covering it with moleskin.

Once the thrust has been broken and the child has been "gradually" introduced to the restraint, there has been a decided improvement in general relaxation and in gaining some voluntary control of the hands and arms. We have had good results with over a dozen cases to date.

The patient will still need assistance in sitting, such as a supportive chair with cut-out tray for front and lateral support. If, when the opisthotonus is controlled, he tends to fall forward or to one side, the situation may be remedied by attaching straps to either side of the chest-band and fastening them behind the chair.

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Neck Involvement . . .

(Continued from page 8)

education is continued when the patient attempts to control his head when first sitting up in the wheelchair. (Later on the patient may use the same muscle groups when learning to use the suspension feeder.)

The mouthpiece can be made to fit the individual patient by asking him to bite on a sheet of dental wax softened under the hot water faucet. Note in the diagram that the mouthpiece is made to hit only the very back teeth. The center of the Y is high to allow the tongue a good deal of excursion in and out of the mouth.

It is felt that one of the most practical aspects of this stick is that it can be easily fabricated in any department. The ½8 inch plastic sheet is sanded and buffed to a highly smooth finish. The edges of the mouthpiece are beveled to keep a minimum of bulk within the mouth. The stick projection itself is kept under a half inch in width to eliminate as much weight as possible. The patient's family can be given instructions in making additional sticks for use at home.

ADAPTATION FOR RESISTANCE TO THE BEATER OF THE FLOOR LOOM*

CORDELIA MYERS, CAPTAIN, A.M.S.C.+ NANCY L. MATHEWS, O.T.R.‡ MARGARET J. SHERMAN, O.T.R.‡

There is an increased tendency among occupational therapists who treat patients with physical disabilities to develop effective adaptations for equipment which will facilitate treatment of patients who have varied diagnoses but have similar symptoms. An example of this is treatment for residual muscle weakness which may result from one of many causes. If treatment of this condition is based on Dr. DeLorme and Dr. Watkins' principle of progressive resistive exercise,1 it is advantageous for the equipment to provide for the resistance to be increased as muscle power is gained. In connection with a course given by the Boston School of Occupational Therapy to study and assist in special projects carried on at individual hospitals, two students from this school constructed such an adaptation at Murphy Army Hospital, Waltham, Massachusetts.

As weaving is an activity universally used for treatment in occupational therapy clinics, a method to give resistance to the beater of a floor loom was studied, and a device which offers progressive resistance was developed. This activity together with the device is effective in the treatment of disabilities resulting in muscle weakness of the trunk, shoulder girdle, upper arm, and forearm. In a graded treatment program this adaptation reduces to a minimum the time required by a therapist to increase the amount of resistance on a loom. It is possible to give resistance either to the shoulder girdle abductors, arm flexors and horizontal adductors, forearm extensors and trunk flexors, or by a change in the direction of pull of the resistance on the beater, to give resistance to shoulder girdle adductors, arm extensors and horizontal abductors, forearm

flexors, and trunk extensors.

Many and varied adaptations have been made on floor looms to provide progressive resistance to specific muscle groups. Temporarily attached weights, sandbags, and springs are commonly employed. The disadvantage of this method is that each must be manually removed from the loom to change the direction, or the amount of resistance. The loom and weights in this adaptation are one unit, which eliminates extra storage space for the weights.

CONSTRUCTION

A 42-inch reed, four harness, six treadle floor loom has been reduced to a two harness, two treadle loom to simplify the weaving process for

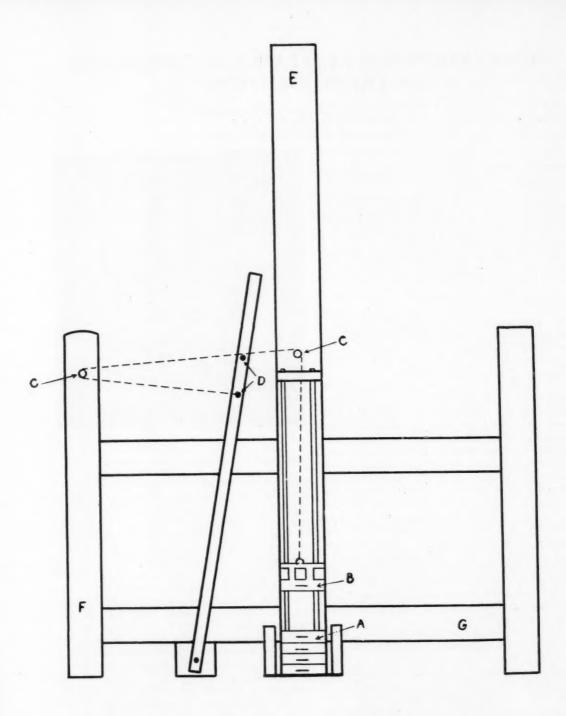


Figure 1. The loom in operation: The swivel snap is attached to the lower screw hook on the beater, giving resistance to the extensor muscle group.

emphasis on exercise rather than intricate weaving. A large durable loom is desirable to withstand the stress of added weights of this adaptation. An adjustable standard wall pulley weight, as used in physical therapy, is permanently attached to the upright side beam. The steel supporting rods of the wall pulley weight are cut to three inches below the height of the lower edge of the reed. A wooden stop is fitted over the top of the steel rods and secured to the outside of the upright beam. The base of the weights is fastened with L type braces to the bottom cross beam of the loom. Three inches above the wooden stop on the upright side beam a swivel pulley is attached by means of a screw eye. A second swivel pulley is placed on the front corner post one inch below the height of the first pulley. On the outside surface of the beater screw hooks are placed one inch below the base of the reed and again four inches below the base of the reed.

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A-INTERLOCKING WEIGHTS
B-TOP WEIGHT
C-SWIVEL PULLEYS
D-SCREW HOOKS

E-UPRIGHT SIDE BEAM F-FRONT CORNER POST G-BOTTOM CROSS BEAM AIRPLANE CABLE INDICATED BY DOTTED LINES

Figure 2. Diagrammatic sketch showing end view of the adapted floor loom.

The end of a five foot length of airplane cable is passed through the opening in the top weight, looped back upon itself, and soldered. The airplane cable passes through the first pulley on the upright side beam. A one-inch loop is formed and soldered in the airplane cable approximately one-third of the distance from the first pulley to the second pulley. The cable continues through the second swivel pulley on the front corner post and a swivel snap is attached to the end of the cable. The length of the cable is determined when the beater is resting against the breast beam. Balanced resistance is obtained by applying this adaptation to both sides of the loom. The wooden portions of the device are stained and shellacked to give a uniform appearance.

OPERATION

Resistance is applied to the triceps muscle when the spring snap is fastened to the lower screw hook on the beater. During this operation the loop which is formed in the airplane cable passes slightly beneath the top screw hook on the beater. The patient receives resistive exercise to the shoulder girdle abductors, arm flexors and horizontal adductors, forearm extensors, and trunk flexors during the weaving process by pushing the beater away from the breast beam and holding while the shuttle is passed through the shed. The amount of resistance is determined by the number of two-pound weights which are interlocked. Resistance to the forearm flexors is given when the spring snap is unfastened from the lower screw hook and the cable loop is placed in the upper screw hook. When the beater is pulled toward the breast beam the weights are raised, thus giving resistance to the shoulder girdle adductors, arm extensors, and horizontal abductors, forearm flexors, and trunk extensors. The interlocking two-pound weights may be adjusted for individual patients up to a maximum resistance of 24 pounds. According to measurement with a spring scale, the combined resistance of the beater and maximum resistance is 35 pounds.

CONCLUSIONS

- 1. A device has been constructed for a floor loom which will facilitate progressive resistive exercise in the treatment of patients with varied diagnoses but with residuals of muscle weakness in the upper extremity.
- 2. This device minimizes preparation time required by the occupational therapist by means of a simplified manner of adding resistance.
- 3. The device is stationary and becomes a permanent part of the loom. Added resistance may be varied from four to twenty-four pounds.

- 4. Either the flexor or the extensor muscle group of the upper extremity may be treated for muscle strengthening.
- 5. The weights and loom remain as a unit, no additional storage space is required for weights.
- 6. In cases treated to date, this adapted floor loom has been a valuable adjunct to the occupational therapy section of the physical medicine service, Murphy Army Hospital, Waltham, Massachusetts.

List of Materials

- Four-harness, six-treadle floor loom
- Interlocking wall pulley weights
- Wood stock for bases 3/4 x 4 x 8"
- Wooden bases 3/4 x 2 x 5
- Airplane cable ½" x 5' Wood screws ½" No. 7 Screw hooks ¾"
- Swivel spring snaps
- Swivel pulleys
- Metal, 1/8" x 1' Solder and shellac

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Reviewed at the Boston School of Occupational Therapy and published with its approval. The statements and conclusions expressed by the authors do not necessarily reflect the opinions of the School.

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SUPINATION TOY

DOROTHY MAUTNER, O.T.R.



Supination Toy

Working with hemiplegics in a C.P. clinic, the need was felt for a toy to encourage supination. This led to the construction of the piece of equipment pictured here, which can be used for the following purposes: (1) measuring

active range of supination and pronation, (2) active assistive exercise for supination and pronation (therapist assisting), (3) active exercise for supination or pronation. It was found that motivation was provided for all the above activities.

A system of providing graded resistive exercise by adding weights to the handle or disk could be worked out.

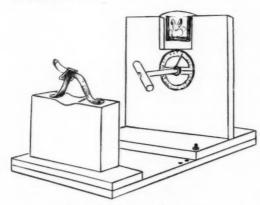


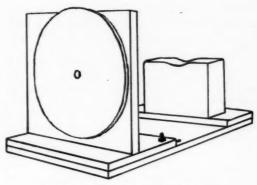
Illustration of the supination toy.

CONSTRUCTION

The handle turns a large wooden disk, along the border of which pictures are mounted. As the patient turns the handle by supinating or pronating, new pictures turn up. Small pieces of cellophane can be taped down on the disk so as to form small pockets and pictures slid into them to make them interchangeable.

The arm support is permanently mounted on the base, but the backpiece is fastened down by means of bolts, so that the distance between the two can be adjusted according to the length of the patient's arm.

Two protractors have been mounted on the backpiece to provide an exact scale for measuring. A nail put through the dowel serves as pointer. Be sure to mount it in such a way that it points to 0 when hand is held in neutral position.



Rear view illustration of the supination toy.

A strap can be put on the handle to help the patient with poor grasp.

Arm support can be padded with foam rubber.

POSITION FOR USING

Have patient sit with arm close to body, elbow flexed at a 90 degree angle to rule out compensatory motion at shoulder joint. Toy is placed to side of arm to be used, and arm is strapped down on arm support right below elbow. Patient grasps handle tightly with dowel between middle and fourth finger.

Appreciation is extended to Ann Franklin, R.P.T., for her suggestions and cooperation in constructing this toy.

EASEL-RUG LOOM COMBINATION

DOROTHY MAUTNER, O.T.R.

Lack of space—the complaint of many occupational therapists—helped create the piece of equipment pictured here. The occupational therapy department owned an easel, but no room could be found for a frame for braid weaving. The problem was



Back view of easel used as rug frame.

solved by turning the easel around and using the frame that was there ready-made. The only work needed was cutting slots in the two cross bars.

There will be "time for reflection" at the AOTA conference, September 29 to October 5, 1956, at the Nicollet Hotel, Minneapolis, Minnesota. Plan now to attend.

NATIONALLY SPEAKING

From the President

Dr. S. I. Hayakawa, one of this country's noted students of semantics and professor of language arts at San Jose State College, was the keynote speaker at the annual conference—his topic "What Are the Goals of Therapy." Dr. Hayakawa's approach to his subject was pertinent, acute and stimulating.

He stated that those who have accepted the responsibility for utilizing their knowledge and skill in the fields of medical care or education must have as one of their prime goals, the development of the dynamically secure individual. He illustrated his concept of dynamic security vividly and in a way that had meaning for each member of his audience. He compared two drivers, daily commuters, on one of our superhighways.

One, the dynamically secure driver, knows the highway may prove dangerous, that he may encounter a car with poor brakes, or an inept driver, or that his own judgment may prove faulty and that he may have an accident. This does not disturb him. He is secure, this security is grounded in his own resources, his skill, his knowledge, his flexibility and his ability to cope with potential danger.

The other driver finds his trip an ordeal fraught with peril. He worries about what may happen, freezes in traffic and is often exhausted when he gets home. This driver may also be secure. His is a different type of security, however, since his inclination probably is to build himself strong protective walls and sit inside of them. For many people the search for security is an unending task of building and mending such walls.

Naturally, as I listened to Dr. Hayakawa, I thought of his interpretation of dynamic security in relation to occupational therapy; first in terms of our patients, then in terms of occupational therapists as members of the medical team and finally in terms of our association. What kind of drivers are we? I decided, and not hastily, that we are probably far better than adequate drivers and what is more important, that we are ever alert to the need to broaden our knowledge and improve our skills to better fit us to travel the constantly more demanding, more complex highways of professional responsibility.

Over 800 people directly concerned with occupational therapy attended the conference in San Francisco. They worked hard. They were there to learn, to share and to contribute. All of us will benefit from this meeting, even those who

have had to wait to receive information on what took place.

Some of the actions taken, the subjects discussed and the progress reported which seem to me to best reflect our awareness of the growing demands of our professional responsibility, were:

1. The determination by the Board of Management that we will establish a coordinated, long-range, flexible plan for the development of our association. As our executive director, Miss Marjorie Fish, so aptly put it, "We must think in these terms if we are to keep our place in the rapid tempo characteristic of organizations in the health field today. We are in the center of the leap from small to big business and good planning is essential."

2. The recommendation by the Board of Management that a study be initiated to re-evaluate the purpose, aim and function of all standing committees and their relationship one to another.

3. The acceptance of the standing operating procedure for the council on education. This includes a provision for a new method of selecting the majority of the members of the committee on clinical affiliation.

4. The report that the American Medical Association Council on Medical Education and Hospitals is in agreement with us in regard to the establishment of a procedure whereby joint periodic surveys can be made of approved schools of occupational therapy. This, when the final plan is accepted and put into operation, will insure maintenance and elevation of standards of education.

5. The acceptance by the Board of Management and the council on education of the proposed program of instruction and plan for the recognition of non-professional personnel. These related proposals have gone forward to the state associations for their consideration.

6. The progress reported by the committee on clinical procedures. This committee is rapidly nearing the completion of its current project of determining the scope and effective practice of occupational therapy in the various diagnostic entities.

7. The recognition by the committee on special studies of its inability to effect its function and the recommendations it made to the Board of Management to help solve this problem. This action could only be taken by a professionally mature group. They are to be commended for their willingness to face a difficult situation and ask for assistance.

8. The rapidity with which the participants in the institute, "The Patients Point of View," were able to establish group working relationships. The conclusions reached are a tribute to the ability and understanding of the participants, panel members and resource consultants.

9. The thoughtful paper presented by Miss Florence Stattel as the first Eleanor Clarke Slagle lecturer. Her subject "Equipment Designed for Occupational Therapy" was well chosen. Her scientific approach, energizing viewpoint and clear delineation of some possible solutions to problems in this area set a milestone in our profession.

There were many other items on the agenda equally worthy of note. All seemed to indicate that we are realistic and practical and that we have maintained breadth of vision in our appreciation of our obligation to provide more effective service to our patients. We must maintain

this vision as we continue to weigh and evaluate what we are doing and why we are doing it. We must be ready to plan for the future and to accept the changes the future brings if we are to insure that we will be able to meet the patient's need today and be prepared to meet his need tomorrow. It is only through the willing acceptance of this responsibility with all its ramifications, that we maintain our dynamic security.

My best wishes to each of you. May this year bring you real professional satisfaction and much personal happiness.

Ruth A. Robinson, Major, AMSC (O.T.R.) President.

From the Editor

In 1949 you honored me with an appointment as your editor and after seven years of working for you, I can say that no one has had more exceptional, tolerant and sympathetic employers. Your help, encouragement and cooperation have been of inestimable value. During my tenure, I have been privileged to meet many of you personally and many more of you through correspondence. It is amazing how much one can glean from letters and so because you have been crossing my palm with silver all these years, I would like to assume the role of seeress, don my robes, polish my crystal ball and give you a character reading.

I am not going to analyze the future because I don't believe I can; I leave your future to you. But we all like to know how we appear to others, so I am taking the liberty of telling you the impressions gained through the editorial office.

You are generous, kind, appreciative and compassionate of others; you are not conceited—no, you are humble almost to the point of having an inferiority complex. You are experimental, ready to ever try the new and an expert at adapting the latest fad. You have vision and ideas but you hate details. How do I know all this? By your self-revelations expressed in your writing.

The first characteristic was "generous"—that means liberal, open handed and is evidenced by your utter lack of formality as expressed by your frequent use of such expressions as "doing wood," "doing leather," the use of "shop" instead of "clinic." It could also be said that indicates a humbleness, too.

Your kindness and appreciation of others are indicated by your deviations in using "cooperative" to mean "the patient does what I want him to do"; your compassion for others is evidenced by the use of the plural even though the patient is doing all the work, for example, "We should do it this way."

Your humbleness shows in your generous use of capitals for every little variation. Most all of you have learned not to capitalize "occupational therapy" but "physical therapy," "speech therapy," "social worker," "committee" are all promoted to the rank of the capitals even when used in the same sentence with the correctly lower cased "occupational therapy."

You minimize your own value by referring to your treatment activities as "crafts" and should you decide to elevate them by referring to your "media" you humbly use a singular treatment. Similarly, you use "criteria" as if it were also singular.

Your only conceit is in referring to your profession as "OT." And this is not really conceit because by doing so you assume everyone is as intelligent as you. In this age of bureaucracy, initials are common but seldom impressive. One man was introduced to a line of students, one of whom was studying OT. He said it was four years before he met someone else who talked of occupational therapy and then referred to it again as OT and he found what course that student was pursuing. A clergyman reported he became very confused by our elliptical expression because to him, OT meant "Old Testament."

Your dislike of details is evidenced by loose phrases such as "in regards to," "I am appreciative," the substitute of "tubercular" for "tuberculous," and "cerebral palsy patient" instead of "cerebral palsied," and by the slang expression "build muscles." "Personnel" meaning "a body of persons or a group" is substituted for "people," and indiscriminately used as in the expression, "twelve personnel," because it has a higher professional sound. And "infer" is substituted when "imply" is correct.

Redundancies are also indications of speed in work with a dislike of details and occupational therapists abound in them, with "OT worker" and "occupational therapy treatment" being the most common, with "consensus of opinion" by no means rare.

You like professional jargon, feeling, I am certain, that it raises your professional worth; so you adopt "attrition" in referring to your slowly growing membership list. "Attrition" means "the gradual wearing or grinding down by continual slight impairments." That is true in industry or in war, where loss is frequently due to injuries, sickness and death. But our attrition rate from these factors is so small as to be infinitesimal. Our membership loss is due to marriage and I refuse to believe marriage is an impairment.

Occupational therapists are so determined to keep everyone happy that even the literature reflects the tendency to sugar-coat. An example of serving the icing without the cake can be observed in a sentence found in a recent article: "Package cake mixes have been found most helpful in making patients feel acceptable," and one I particularly liked because it sounds so good: "It was voted that the committee remain intact to give further study through the . . . subcommittee and reach a conclusion with authority to conclude in time to implement by next school year." I often wonder how our foreign subscribers translate our professional gobbledegook.

And so by this character reading it is obvious I have lively, interesting and stimulating bosses. Your criticisms have been helpful and your appreciation when I have managed to please you encourages me to do even better. Therefore any satisfaction you get from the Journal is the result of your own efforts. Occupational therapy as a profession has been growing, as an association it also has been growing, and as a professional journal, AJOT is progressing. One goal is achieved only to find another up ahead and some days, as your editor, I feel like a runner going around and round the circuit, faster and faster, but the rabbit is always just ahead. Other times I feel like Alice, I have to run to stay in place. Regardless of my moods, however, they are always ones of action, and the rabbit is the constant reappraisal of Journal goals.

The first goal you set was your own magazine, then material to fill the magazine, then improvement of the quality of the material. From your comments I judge these goals have been adequately met. But the last time a picture was taken of the Journal, the perspective was wrong so that one section was enlarged out of all proportion to the rest of the body. This outstretched arm of the Journal is physical disabilities. It is enlarged out of all proportion for one reason only-the occupational therapists in this field write. Therefore our next goal—our rabbit—is better balance in the future. The Journal cannot print something that isn't written, so again it is up to you. If you want that picture changed, you and you alone can change it. Therefore for the future let us hope for better proportions through more subject matter from more service areas and, of course, our ever present goalmore financial security.

These aims are simple and they are solvable but they can only be gained by your effort. If every occupational therapist bought from our advertisers, our revenue would be greater. If every occupational therapist would write, we would be bound to achieve our balanced subject matter. Since the goals are reasonable and solutions are simple, I have hope they will be achieved as readily as the goals of the past.

I leave the future up to you.

Lucie Spence Murphy, O.T.R. Editor

Letter to the Editor

To the Editor:

In the October issue of the Journal, Henry N. Peters claims to have determined experimentally that (1) a group of patients required to do intensive problem solving showed higher post-treatment performance level than a group which had only received intensive OT training; (2) the problem-solving group showed higher post-treatment performance than another group which had received only ward OT; (3) the ward OT group showed higher post-treatment performance than the intensive OT group. To his experimental conclusions he adds the private hypothesis that the superiority of the problem-solving group is due to exercise of cortical areas previously in disuse.

Occupational therapists with only a minimal acquaintance with statistical and experimental methods in the sciences¹ may question conclusion 1 and reject 2 and 3

on the following grounds:

A. Peters' use of the Chi-Square test on the Table I data is illicit because the measures are not independent. He used matched groups (on the Gardner scale) throughout. Furthermore, he does not specify whether his t was a t for paired measures, as it should have been, or a t for independent measures.

B. No information was obtained on the work performance of group III (ward OT) during treatment. Its post-treatment cannot fruitfully be compared with the

other two groups because of this omission.

C. Though Peters felt obliged to employ an analysis of co-variance to support the t-test on Table I results, he failed to employ it in the Table II analysis. Where-ever matched groups are used experimentally, the analysis of co-variance is virtually mandatory. It is clear that Peters prevented himself from using it by not collecting

D. Table II shows non-sig

D. Table II shows non-significant post-treatment differences for all groups. (This means no difference statistically.) The fact that Peters was able to drag out a significance between I and II by a telescoping of the complete Gardner scale does not alter the initial lack of differences in the full measures: from practically any set of data, some significant difference can be teased out of the obtained measures after the fact. The object in a scientific endeavor is to decide on the measure before the experiment and stick to it whether it yields significance or not.

E. Even with the post facto test in Table II, Peters finds significance only between I and II, as in Table 1. Thus his conclusion 3 comes but one sentence before its own explicit denial—"The difference between the means is small and unreliable." This kind of reification of non-existent statistical differences is generally associated with the enviable attribute of knowing everything about the outcome of an experiment before it is performed. The same applies for the claimed superiority of I to III

(conclusion 2 above).

F. Peters' conclusion that the differences between I and II are due to learning does not necessarily follow. He used no control group for the possibility that obtained superiority of I could result from any specialized attention given patients of that group over and above what the intensive OT patients and ward OT patients got. If, as he states, the personnel thought patients in III had been rejected from the study, there is no reason to believe that the highly individualized treatment of group I patients would go unnoticed either by personnel or

^{1.} Readable texts are: Linquist, Design and Analysis of Experiments, New York, Houghton-Mifflin, 1953, Snedecor, Statistical Methods, Collegiate Press, Inc., of Iowa State College, Ames, Iowa, 1946.

patients. In short, it is not demonstrated by this study that a half hour of individually administered hydrotherapy could not have accomplished the same results as the learning tests battery. The learning hypothesis is also open to serious question because of the experimenter's apparent failure to equate deletions from his treatment groups during the course of the study. When for some reason he was forced to drop a patient from one group, his matched counterparts in the other two groups should have been dropped also, in order to equalize the effect on the group means.

G. Finally, the Peters' hypothesis about use and disuse of the cortex in schizophrenia is without empirical foundation, and serves only to obscure the essentials of the

experiment.

Sincerely, Langhorne Alexander McConnell, O.T.R. (Mrs. David G.)

Abstracts of ANNUAL REPORTS

AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

Sheraton-Palace Hotel October, 1955

EXECUTIVE DIRECTOR'S REPORT

Introduction. This year is another one in which our professional horizons have swept along in front of us and in which the scope of demands, activities to meet those demands, and breadth of service for which we have been called upon has increased as the year progressed. It has been healthy, hazardous and stimulating.

More and more the excellent work of the Association's standing and special committees and the education and recruitment and publicity offices as reported and published stand on their own merits and give a splendid

accounting of our progress.

It becomes the strategic position of the executive director to put together the salient factors involved for us to look at. This year we seem, particularly, to have reached a point, because of rapid growth and extended activities, which requires close scrutiny toward the most effective coordination and synchronization of our program. A recommendation is being prepared for the setting up of a long-range development plan for the Association.

Membership. As of September, 1955, there were 3,896 paid members which represents an increase of 254 over 1954. Active members 2,913; sustaining 297; associate subscriber 75; associate 67; student 528; honorary and life 16. Registered therapists totaled 4,784, which represents an increase of 689 over the previous year.

Financial statements.

This year marked the change of our fiscal year from August 31 to June 30. The work in connection with the keeping of the accounts has increased correspondingly with our growing activities. More modern bookkeeping methods have become necessary for the large-scale business. I wish to take this opportunity to thank our auditor, Mr. Carr, who has served the Association since 1925. He has guided us in the reorganization of our bookkeeping and office procedures and has made valuable recommendations for further improvements which were referred to in the treasurer's letter to delegates and upon which the Board will take action.

Inside the national office.

1. New office procedures on membership billing, book-keeping and records are being initiated this fall and the methods and forms are going into effect. It is a big

undertaking and many rough spots must be smoothed out but we anticipate marked improvement in efficiency and speed over the outmoded system previously used.

2. New office quarters have been acquired in the Fiske Building, 250 West 57th Street, New York City, and we will move on November 14, 1955. The national office staff appreciates action of the membership and Board enabling us to move into desperately needed larger quarters. We are slightly more than doubling our present square footage. Floor plans allow for adequate reception and office space, storage and stock room, and a conference room which will enable us to accommodate committees and related professional groups.

Some additional furnishings and equipment are necessary in setting up the quarters as no new furniture and very little equipment has been purchased in recent years. The equipment fund from reserve funds will finance

this.

3. Personnel. The patience and cooperation of the professional and secretarial staff has been outstanding this year under working conditions which have become unfair for comfort and efficiency. Each member of the secretarial staff has visited a local hospital or rehabilitation center.

It will be necessary to add a mail-stockroom clerk to our staff and another stenographer to handle the volume

of mail and correspondence.

We express appreciation to Dr. Hyman Brandt for his excellent continued help and guidance in the educational office and in work on preparing applications for grant

projects

Recruitment and publicity. The recruitment office has functioned alertly during its one year of existence under a grant from the National Foundation for Infantile Paralysis. I wish to express appreciation to Miss Dorothy Lehman, director, and Mr. William Bowser, assistant and secretary for their strenuous efforts and the unique contribution they have made. They were a fine addition to the national office staff.

It is important to note that the new schools committee, and an area committee for public information, were established this year as a part of the structure in tying together local activity and national programming. They should prove a strong link in perpetuating good results. A projected three-year program and directives for area

committee activities has been prepared.

Newly developed printed materials have included: recruiting and publicity bulletins; school kit; recruitment and publicity kit; speakers hardchart; TV and radio spots with depictions; posters; brochures. The printed edition of the latter two, have already totaled 113,000.

We have continued to explore film possibilities for the future. We would like to have a die made of the national insignia to be placed on our postal meter, thus imprinting our metered mail. This will cost approximately \$10.00. The Board is asked to give it con-

sideration.

The National Foundation for Infantile Paralysis grant terminates November 1, 1955, and the immediate functions of the recruitment office will cease until such time as further funds become available to continue similar direction of the work at the national level. We are deeply appreciative of the generous assistance which the National Foundation has given us. The organization and momentum of work conducted by the various committees should not slacken. We are better equipped to continue as a result of the special program this year and we look to our state, schools and area committees, with national office backing, for a continuing program.

Membership services. Mrs. Frances Shuff carries the major part of these responsibilities and she has done a

very creditable piece of work.

1. Placement service has increased in activity this year. One major listing and three supplements have been published. It has been customary to send a list of available therapists to institutions and agencies listed in "Positions Available," but therapists have been lax in replying to correspondence from administrators which has resulted in criticism. Therapists also list desired geographical locations and accept positions elsewhere. Results achieved by referrals did not warrant the time involved. Recognizing these conditions, referrals have been made only when specifically requested. This has enabled us to publish supplements more frequently and to keep them accurate and current.

Placement Statistics

Inquiries for placement information	521
Foreign therapists requesting information	14
Positions filled from referrals, lists or schools	128
Vacancies listed	534
Requests for Therapists November 1954-October 19	55
Cerebral Palsy	53
General Medical & Surgical	30
Pediatrics	31
Psychiatric	112
Physical Disabilities	100
Tuberculosis	49
Veterans Administration (all of the above)	
Schools	25
Miscellaneous Agencies	28
Civil Service Agencies	16
Part-Time	
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It is recommended that an adjustment upward be considered for the initial recommended salary (from \$3,500.00 to \$3,700.00 in AOTA Personnel Policies) as salary levels generally have been increased in civil service

and in many voluntary institutions.

2. Newsletter. Special inserts in the Newsletter have been requested throughout the year by organizations and institutions. Because of the resultant expenditure of time and increased postage involved, it is recommended that a minimal charge be made for this service. We would like to accommodate these requests and give our members the advantage of pertinent information which these materials always represent. The Board is asked to consider this plan.

3. The Book Loan. One hundred and seventy-eight therapists have requested material from our book loan.

Forty-seven additions have been annexed.

4. Yearbook. The medical advisory council and state associations with their presidents have been added to the masthead. One hundred and eighteen Yearbooks were returned to the national office because of incorrect address. This is a smaller number than has been returned previously because of a careful address check before mailing.

Advertising was solicited directly by mail and telephone by Mrs. Shuff. In order to increase the total number of advertisers, an Eastern representative is being sought. Interested OTR's have been invited to apply

for this position.

The 1955 Yearbook carried 56 advertisers as compared to 59 the previous year. It is interesting to note that there were more than double the number of 1/8th

page ads as compared to last year.

5. Committees. The national office has handled the arrangements for the educational exhibits for the 1955 annual conference. This has previously been handled by the local conference committee.

For the first time, a meeting of all standing committee chairmen has been scheduled at the annual conference. This meeting is experimental and we hope helpful suggestions will stem from it for our immediate and future planning by way of closer integration of committee activities in terms of the Association program.

State associations. There are now 36 state groups with three pending. We express appreciation to the several associations who have sent in financial donations. We also express thanks to those who have taken the responsibility of handling and coverage of the AOTA exhibit when national staff could not be present. This is a time consuming but professionally important assignment and the cooperation shown has been excellent.

The growth, in size and number of our state and regional associations is becoming impressive. A composite of the delegate reports in AJOT throughout the year would furnish us with an index from which trends and needs could be compiled. It is recommended that an

annual summary be presented.

Literature and publications. The increasing volume of available printed matter for distribution continues to meet a need. This includes our technical reprints, recruitment and public information literature and miscellaneous materials. The handling of all of this plus routine correspondence entails a large-scale mailing operation. The metered mail count for this year is approximately 97,000 pieces of mail. This does not include the large volume of bulk mailing nor all of the mail from the recruitment and publicity division whose figure is approximately 71,300 pieces of mail. In order to deal with this, we now have mailbag pick-up service and average six full outgoing mailbags per week.

National office staff members have contributed to requests for the writing of articles. Among these, material wholly or in part has been prepared for: OT section of Psychiatric Review; Cerebral Palsy Review; OT chapter in new rehabilitation text; Journal of the Student Medical Association; Practical Nurses Digest.

Joint Inter-Agency Work. The listing of meetings attended and participated in by staff and association representatives indicates the widespread nature of our professional contacts so essential today for sound work in the health field. The following are significant:

National Health Council. Establishment of a Health

Careers Commission.

Joint Commission on Mental Health & Illness, an American Medical Association and American Psychiatric Association sponsored project in which Beatrice Wade is representing AOTA.

Health Resources Advisory Committee, Subcommittee on Paramedical Personnel in Rehabilitation and Care of the Chronically Ill. Miss Helen Willard is representing

occupational therapy.

Office of Vocational Rehabilitation, Department of Health, Education, and Welfare. Appointment of educational consultants in OT to advise relative to the new health legislation and resulting grants.

American Hospital Association Institute, 2nd annual, jointly sponsored in Philadelphia in April. Seventy-seven students from 25 states plus Canada and Hawaii attended. Plans are being made for the 1956 institute.

Grants and foundations. Most of the 1955 grants have already been reported in detail for the information of the membership. Total grants received this year amounted to \$71,354.00 from four organizations. We are deeply grateful for their generous support. These represented the following:

National Foundation for Infantile Paralysis. One year grant to establish recruitment and publicity office and continue program from previous year.

United Cerebral Palsy Association; Undergraduate

scholarships for the 1955-56 academic year.

National Institute of Mental Health, 18 month project. Implementation started during the summer. October

AJOT carries full description.

Office of Vocational Rehabilitation, one week OT institute for directors of schools and student affiliation centers. OVR granted an additional sum for teaching and traineeships totaling \$59,186.00 to 18 OT schools. This was granted directly to the schools in response to their applications.

Medical advisory council. Our work in developing the council continues. Members have been responsive through the year in our requests for individual consultation. Confirmation of continuation of appointment has been received from the president of each of the seven medical specialty organizations which our council members represent. This is a notable record and one of which we are duly proud.

AOTA constitution and bylaws. Amendment to the certificate of incorporation and extension of corporate existence of the Association, and amendments and additions to the present constitution were approved by the Board at the midyear meeting as drawn up by legal counsel. The report from our attorney, together with copies of the constitution and bylaw changes, has been mailed to all state presidents, delegates, alternate delegates and each individual member of the Association. This will be voted upon by the House of Delegates and membership at the 1955 annual conference. I wish to express appreciation to Mr. Maurice Feldman for the splendid support and help he has extended to us in working through this rather complex matter.

Blue Cross. The House of Delegates and the national office were asked to investigate relative to inclusion of OT treatment charges in hospital insurance plans. Though all Blue Cross plans are independent, patients requiring hospital care occasionally have occupational therapy or physical therapy included. Charges for this are excluded when admission is for this treatment alone.

International affairs. No annual report is complete without reference to our participation and role in world health and rehabilitation matters. Our activities proclaim the place we are beginning to fulfill:

 World Federation of Occupational Therapists. Proceedings are now available from the national office. Preparations are being made for the 1956 meeting of the WFOT council in Philadelphia.

2. We are in official correspondence relative to endorsement of the 1956 2nd world congress of the Phy-

sical Therapy Confederation.

3. Correspondence and communication with the UN, WHO, UNESCO are frequent. We are represented in the Conference of World Organizations Interested in the Handicapped. The December issue of AJOT will carry an article on this by Miss Spackman and Miss Fish.

4. Visitors to the national office this year have comprised doctors, occupational therapists and related professional personnel from Australia, Brazil, France, Germany, Israel, Peru and Portugal. We are proud to announce that the first two Panamanian students sent to the United States for occupational therapy training under the Point Four Program have just received their registration and returned to Central America to establish programs.

Public relations. The following list represents some of the meetings during the past six months attended by national office staff and/or members serving as official representatives of the AOTA:

National Association on Mental Deficiency. Speaker at annual meeting, Detroit. American Businessmen's Club, National scholarship project committee, Chicago.

American Hospital Association. Annual meeting, Atlantic City.

American Psychiatric Association. Annual meeting, Atlantic City.

American Personnel & Guidance Association. Speaker at annual meeting, Chicago.

International Society for the Welfare of Cripples. Reception for Korean doctor, New York.

Michigan OT Association. Speaker at annual meeting, Northville.

Mid-Atlantic OT Regional meeting. Atlantic City. National Foundation for Infantile Paralysis. Meeting of Leaders of National Organizations, New York.

National Health Council. Forum, Board of Directors, Educational Committee, Agency Executive, New York.

National Rehabilitation Association. Rehabilitation conference, New York.

United States Department of Labor. Conference on effective use of woman power, Washington, D. C. Veterans Administration. Consultant in OT, Washing-

ton, D. C.

Women's Medical Specialists Corp. Reception for Colonel Harriet Lee, Governors Island, New York.

Field Visits (Clinical and Educational).

Goldwater Memorial Hospital, New York

Michigan State College, Ypsilanti

Northville State Hospital, Michigan

University Hospital, Cleveland

Western Michigan College of Education, Kalamazoo Western Reserve University Medical School, Cleveland

Traveling Exhibit Displayed at the following:

American Hospital Association, annual meeting, Atlantic City

American Personnel and Guidance Association, annual meeting, Chicago

American Psychiatric Association, annual meeting, Atlantic City

American Public Health Association, annual meeting, Kansas City

American Occupational Therapy Association, annual meeting, San Francisco

Creedmoor State Hospital, New York

Congress of Physical Medicine and Rehabilitation, annual meeting, Detroit

Southwest Clinical Society conference, Kansas City, Kansas

Recommendations for 1956. I believe this has been one of the most active years in our history. The Association reports add up to standards, progress, growth and mark the margin between standing still and going ahead. Our margins are not narrowing, they are becoming wider and firmer. The strides this profession has made in maximizing its contribution to the health field, continue to raise insistent demands.

Deep appreciation is expressed for the understanding and help of the officers, executive committee, Board of Management, committee chairmen, members, and each individual member of the professional and secretarial staff of the national office. It has been a privilege to complete another year of work with you.

> Respectfully submitted, Marjorie Fish, O.T.R. Executive Director

CONSTITUTION AND BYLAW REORGANIZATION

By action of the executive committee and Board of Management at the 1954 annual meeting, legal counsel was engaged to study and put our constitution and bylaws in order. Mr. Maurice Feldman, attorney in New York City, was engaged to conduct this business for us. Mr. Feldman has given careful review and study to this matter during the past year and indicates our constitution has become outmoded due to our rapid growth through the years. This is not uncommon among voluntary agencies.

Our attorney made several recommendations:

- 1. An amendment to the certificate of incorporation and extension of corporate existence of the Association. This was a technical matter and has been attended to.
- 2. Changes, amendments and additions to the present constitution.

At the 1955 midyear meeting, the Board voted approval to the certificate of incorporation and to the suggested changes in the constitution. At the 1955 annual meeting, the House of Delegates and Association members voted approval.

SUGGESTED CHANGES AND ADDITIONS

1. Change heading to read:

CONSTITUTION

and Bylaws

THE AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

- 2. (a) Change title of Article I to read: Name, Objects and Powers
 - (b) Add to Article I the following Sec. 3:
- Sec. 3. As a means of accomplishing the foregoing purposes, the Association shall have the following powers:
- (a) To acquire, take and hold, by bequest, devise, grant, gift, purchase, exchange, lease, transfer, judicial order or decree, or otherwise, either absolutely or in trust, for any of its objects and purposes, any property, both real and personal, of whatsoever kind, nature or description and wheresoever situate; (b) To sell, mortgage, exchange, lease, convey, transfer, make grants, or otherwise dispose of any such property, both real and personal, as the objects and purposes of the Association may require, subject to such limitations as may be prescribed by law; (c) To administer, invest and reinvest its property, and deal with and expend the income and principal of the Association; (d) To borrow money, and to make, accept, endorse, execute and issue promissory notes and other obligations in payment for property acquired and money borrowed; and (e) in general to exercise such powers as are incidental or conducive to the attainment of the objects and purposes of the Asso-
- 3. Add to Article II the following Sec. 4 and Sec. 5: Sec. 4. The right of a member to vote and all his right, title and interest in or to the Association, or its property, shall cease on the termination of his membership.
- Sec. 5. The annual meeting of the members of the Association shall be held at a time and place to be designated by the Board of Management on at least sixty days' notice by mail to the members, at which time the results of elections shall be announced by the nominating committee and such additional business as may be

required shall be transacted. Special meetings of the members may be called at any time by the president or by the executive committee or by five of the managers on at least three weeks' notice by mail to the members. At any meeting of the members one-third of the voting members present in person or by proxy shall be a quorum for all purposes and each voting member shall be entitled to vote in person or by proxy in writing. All questions shall be decided by a majority vote of the voting members present in person or by proxy at any validly constituted meeting or, in the case of a mail vote, by a majority of the mail votes cast provided that at least one-third of the voting members shall have cast their vote on a mail vote.

4. Insert new Article IV as follows:

ARTICLE IV Board of Management

Sec. 1. The business and affairs of the Association shall be managed and controlled by a board of twentythree managers to be known as the Board of Management. The said Board of Management shall consist of the four officers of the Association, six members of the House of Delegates and thirteen other persons, eight of whom shall have been active members of the Association for one year previous to election. The other five may be active therapists who have been active members for one year, or Fellows. Those board members other than the officers and the six members from the House of Delegates shall be elected by the membership for a threeyear period, and no person shall serve more than two consecutive terms. Four shall be retired one year, four the following year, and five every third year. The executive director shall act as secretary for the Board and for the Association, and shall issue orders for all meetings of the Board of Management. The president-elect, treasurer-elect, past president and honorary managers appointed by the Board of Management may attend the meetings of the Board of Management but shall not be entitled to vote and shall not be deemed members of the Board.

Sec. 2. There shall be an annual meeting and a midyear meeting of the Board of Management at a time and place to be designated by the executive committee of the Board. Notice of such meetings shall be given by mail at least two weeks prior to the date thereof. Special meetings may be called, on at least one week's notice by mail, by order of the president or by the executive committee or at the written request of five managers or at the written request of one-third of the members of the House of Delegates. A majority of the Board of Management shall constitute a quorum at any meeting of the Board, all questions shall be decided by a majority vote of the managers present thereat.

Sec. 3. Upon the day before and at the close of the annual meeting, the Board of Management shall meet to receive and act upon reports of officers, committees and recommendations of the House of Delegates. At each annual meeting the Board, through its executive director, shall submit a report of the affairs of the Association, with the expenditures of the past year and an estimate of the expenses for the coming year and shall report at other times, if called upon to do so, by a majority of all the members of the Association.

Sec. 4. In emergency situation, the president of the Association may call for a vote by mail by the Board of Management, the executive committee, the House of Delegates or the Association on matters that have been discussed in regular meeting or in special session of any of these bodies, provided, however, that such vote by

any of these bodies shall be equal to a quorum in that body and that all questions shall be decided by a majority of those voting.

5. In Article V. Sec. 4, after the first four words "The executive committee shall," insert the following

phrase set off by commas:

, subject to the direction and control of the

Board of Management,

6. Insert in place of present Sec. 9 of Article VI, the

following new Sec. 9:

Sec. 9. The House of Delegates shall elect annually a chairman of the nominating committee of the Association. The chairman will appoint his own committee of no less than four members other than himself. The chairman may be a member of the House of Delegates but may not be a manager or an officer of the Association. Three of the committee members so appointed by the chairman shall be chosen from the Board of Management and the remaining committee members shall be from the membership at large and shall not be a manager or officer.

7. In Article VIII strike out the word "convention" at the end of Sec. 1 and at the end of Sec. 2 and in

place thereof insert the word:

meeting
8. In Article X, Sec. 1 after the words "receivable from" insert the following words:

the membership and

In Article X, Sec. 2 after the words "Any member" insert the following words:

or association

9. Insert in place of Article XI the following new Article XI:

ARTICLE XI AMENDMENTS

Sec. 1. The constitution and bylaws may be altered, amended or repealed at any legally constituted meeting of the members of the Association by a majority vote of the voting members present in person or by proxy, provided: (a) that the proposed action has been approved by a majority of the Delegates present at a legally constituted meeting of the House of Delegates, (b) that the proposed action has been approved by a majority of the Managers present at a legally constituted meeting of the Board of Management and (c) that the proposed action is inserted in the notices of such meetings of the members of the Association, the House of Delegates and the Board of Management.

Sec. 2. A certified copy of the accepted amendment shall be printed in the following current issue of the official publication.

10. Change the title of Article XII to:

Miscellaneous Provisions

and add the following new sections 2, 3, 4 and 5:

Sec. 2. The place of the principal office of the Association shall be selected by the Board of Management which shall have the power to open offices at such other places as it may from time to time appoint or the purposes of the Association may require.

Sec. 3. The Board of Management, except as in the constitution and bylaws otherwise provided, may authorize any officer or officers, agent or agents, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the Association, and such authority may be general or confined to specific instances; and unless so authorized by the Board of Management, no officer, agent or employee shall have any power of authority to bind the Association by any contract or engagement or to pledge its credit or render it liable pecuniarily for any purpose or to any amount. The

Board of Management may appoint such agents and representatives of the Association with such powers and to perform such acts or duties on behalf of the Association as the Board of Management may see fit, in so far as may be consistent with the constitution and bylaws, to the extent authorized or permitted by law.

Sec. 4. Unless otherwise ordered by the Board of Management, the president shall have full power and authority on behalf of the Association to vote, either in person or by proxy, at any meetings of stockholders or any corporation in which this Association may hold stock, and at any such meeting may possess and exercise any and all of the rights and powers incident to the ownership of such stock which, as the owner thereof, this Association might have possessed and exercised if present. The Board of Management may confer like powers upon any other person or persons from time to time, and may revoke any such powers as granted at its pleasure.

Sec. 5. The fiscal year of the Association shall be determined by the Board of Management which, at the end of each fiscal year, shall cause an audit of the books of the Association to be made by a certified

public accountant or accountants.

TREASURER'S REPORT

It is a pleasure to report that with the increase of the registration fee from \$5.00 to \$8.00 the Association is in a strong financial position. This increase of the registration fee, which had been approved by the Board in April in Atlanta, was unanimously approved by the House at its meeting Sunday.

The finances of the Association used to be a simple matter. This is no longer the case. Last year we handled in the office \$160,000 not counting approximately \$50,000 in reserve funds and \$18,500 in endowment. This next year it is estimated that we will handle over \$250,000 if we receive the grants which we have reason

to believe we shall.

The growth in our finances is symbolic of the growth of the activity in the national office. Therefore, we have had to make a number of changes in office equipment, such as a new addressograph machine; in office secretarial staff to improve service to the members; and, of course, the new office with twice the floor space and some new furniture.

One step forward which it is a pleasure to report is the establishment of a \$5,000 revolving fund for the publishing of manuals and proceedings. This will enable the Association to make available some of the excellent material being developed in such committees as the committee on clinical procedures.

It is the support of every member of the Association that has made the present progress possible. What our financial needs will be in the future is hard to say, but there are three things which you can each do to insure our security:

- Support the advertisers in AJOT and the exhibitions. Approximately one-half of the cost of AJOT is paid for by advertising.
- 2. Encourage every practicing non-member O.T.R. to become a member. There are 300 backsliders. If they were members it would mean \$3,000.
- 3. Encourage all who can to become sustaining members, i.e., to pay \$12.00 dues instead of \$10.00.

It is only by the contribution of each of us in work, time and money that collectively we can build a strong association.

Respectfully submitted, Clare Spackman, O.T.R. Treasurer

FINANCIAL STATEMENT

General Fund

	Actual Income & Expense— 10 Months to June 30, 1955	Actual Income & Expense— July and Aug., 1955	Actual Income & Expense— Sept., 1954, to Aug., 1955	Estimated Budget Year Ending June 30, 1956
COME:				
Registration fees Membership dues AJOT—subscriptions		\$ 113.00 247.00	\$26,129.75 25,203.00	\$ 34,200.00 25,000.00
Member\$11,508.30)				
Other	14,674.53	501.00	15,175.53	16,000.00
AJOT—advertising		3,283.79 176.23	12,542.64	12,500.00
Sale of insignia		107.65	925.30	3,200.00
Sale of pins		10.00	89.25)	0,2
Sale of yearbook copies		30.00	180.00	200.00
Yearbook advertising		286.53	1,493.93	2,400.00
Volunteer course			91.00	75.00
Conference		832.50	10,031.66	7,500.00
Interest—bank & bondsWFOT		346.27	913.45	650.00
WFOT		9.00	131.31	200.00
	\$88,952.84	\$ 5,942.97	\$94,895.81	\$101,925.00
XPENSES:				,
Salaries				
Professional	\$ 9,166.60	\$ 1,833.32	\$10,999.92)	4 07 010
Secretarial		1,907.30	11,421.78	\$ 25,040.00
Temporary secretarial		97.56	945.99	350.00
Travel		8.00	1,935.41	3,000.00
Cooperation with others		-	202.35	300.00
Recruitment & publicity		_	1,051.24	2,500.00
Exhibits out of NFIP—I grant		26.00	630.90	500.00
Office repair		9.72	502.49 49.32	500.00 200.00
Postage & expressage		199.63	1,779.09	2,000.00
Books & subscriptions		2.08	78.83	150.00
Rent & light		350.00	2,100.00	5,200.00
Telephone & telegraph	697.22	97.24	794.46	700.00
Legal & auditing fees		_	591.90	550.00
Gratuities		_	115.00	125.00
Grant to educational fund		1 222 00	8,305.00	9,095.00
AJOT—cost & expense		1,337.80 453.42	21,592.62)	25,000.00
Yearbook—postage		6.06	1,883.50)	1,600.00
printing			7,190.85	7,200.00
Conf.—1954	,	_	7,689.55	6,000.0
1955		38.05	209.62	-1
Newsletter	1,636.17	302.58	1,938.75	1,800.00
Purchase of reprints)	
Purchase of insignia		49.38	2,042.73	2,500.00
Purchase of pins		04.10	2 225 55	0.000.01
Office supplies & expenses		94.12 78.00	2,235.58	2,200.00
Taxes		180.33	1,170.86 819.94	1,800.00
Miscellaneous		2.35	36.28	75.0
Furniture & fixtures		-	66.95	100.00
Purchase of bond			500.00	500.0
Reserve	******	_	-	
Depreciation		_	_	500.0
Natl. office procedure consult.				200.0
Contingency fund	\$83,509.10	\$ 7,072.94	\$90,582.04	\$ 97,498.0

Educational Fund

	Actual Income & Expense— 10 Months to June 30, 1955	Actual Income & Expense— July and Aug., 1955	Actual Income & Expense— Sept., 1954, to Aug., 1955	Estimated Budget Year Ending June 30, 1956
NCOME:				
Grant from general fund	6,204.00 1,263.62 2,726.00 1,013.25	\$	\$ 8,303.00 6,229.00 380.00 1,521.83 1,200.00 2,726.00 1,110.90 81.08	\$ 9,095,00 9,000.00 6,000.00 1,000.00 ————————————————————————————————
	\$19,571.31	\$ 1,982.50	\$21,553.81	\$ 29,165.00
EXPENSES:				
Salaries				
Professional	2,685.91	\$ 833.32 178.98	\$ 4,916.60) 2,864.89)	\$ 13,450.00
Temporary secretarial		(_	300.00
Repairs		(56.14)	488.66 59.25	2,000.00
Postage		47.52	457.70	200.00 400.00
Rent & light		150.00	785.00	2,800.00
Telephone & telegraph	213.50	35.60	249.10	240.00
Legal & auditing	148.75	_	148.75	150.00
Conference institute	2,475,16	_	2,475.16	2,000.00
Purchase of educational material	704.72	-	704.72	900.00
Office supplies & expenses	314,41	20.93	335.34	350.00
Printing	520.79	300.75	821.54	350.00
Taxes	174.95	40.82	215.77	300.00
Miscellaneous			2.94	75.00
Consultation	,	936.00	4,716.00	2,500.00
Computation	365.00	207.00	572.00	700.00
Special services	833.00	183.00	1,016.00	1,200.00
Examination expenses		23.22	515.62	550.00
Committee expenses	175.41	_	175.41	300.00
Furniture & fixtures Depreciation			_	150.00
Reserve	*********		-	
	\$18,619.45	\$ 2,901.00	\$21,520.45	\$ 28,915.00
Contingency fund	**********			250.00 \$ 29,165.00

Reserve Funds

Cash		
Reserve for scholarship		
Reserve for research project		(Balance from Mary Morris donation)
NFIP—recruitment program	467.71	(Balance from NFIP—grant I, 1953)
Equipment and furniture	2,227,90	(
Accounts payable		
4	31,787,79	
Accounts receivable*	13,799.06	(O.T. institute, office of vocational rehabilitation)

^{*}Under the plan of Federal grants, the grantee advances the amount necessary to meet the institute costs. We were reimbursed by the Government immediately upon completion of the institute.

 .\$23,100.00

Grants

National Foundation of Infantile Paralysis: grant \$19,500.00 balance \$8,012.22
United Cerebral Palsy, scholarship fund: grant \$15,000.00 balance \$597.88
Office of Vocational Rehabilitation: (O.T. institute) grant \$14,830.29 balance \$1,031.23

\$49,330.29 \$9,641.3

REPORT OF THE COMMITTEE TO PLAN IMPLEMENTATION OF RECOGNITION OF NON-PROFESSIONAL PERSONNEL IN THE FIELD OF OCCUPATIONAL THERAPY

The committee on recognition of non-professional personnel (occupational therapy aides) makes the following recommendations:

1. The American Occupational Therapy Association establish training standards for non-professional personnel (occupational therapy aides). A suggested outline of such a training program is appended to this report,

2. An institution desiring to conduct an approved training program for non-professional personnel develop it from the American Occupational Therapy Association outline and submit its program and its examination to the association for approval.

3. The American Occupational Therapy Association give tentative approval to such a program and its examination until a representative of the association has validated such approval through a personal visit.

4. A system of continuing approval be maintained by the American Occupational Therapy Association.

5. Insignia (design to be developed and approved by the American Occupational Therapy Association) be made available to: (a) graduates of approved programs; initial insignia to be obtained by the director of the training program from the American Occupational Therapy Association; (b) those who have worked a minimum of two (2) years in the field and have satisfactory recommendations from three (3) qualified individuals, one of whom must be a registered occupational therapist. It is suggested that after three (3) years this benignant clause be eliminated.

6. Consideration be given to the revision of the American Occupational Therapy Association membership categories to include this type of personnel. Further that consideration be given to the advantages and problems involved in establishing a means whereby this group can be given a voice in the organization. Meanwhile, that non-professional personnel (occupational therapy aides) be encouraged to become associate members of the American Occupational Therapy Association.

This committee would like to point out that the training and use of non-professional personnel alone cannot solve the problem. Effective use of subsidiary personnel is dependent upon specific training of such personnel and the quality of the professional supervision available. In recent years there has been a growing awareness of the need to improve the quality of treatment and treatment supervision. Specific efforts to accomplish this have been and are being made. There must be a continuation of programs and studies such as those under the auspices of the Office of Vocational Rehabilitation, National Institute of Mental Health and the clinical procedures committee of the American Occupational Therapy Association.

The association must continue to obtain funds from interested organizations and agencies to subsidize the training of professional and non-professional personnel.

Gail S. Fidler, O.T.R. Ruth A. Robinson, Major, AMSC (OT) Joint Chairmen

STATEMENT OF NON-PROFESSIONAL PERSONNEL

1. The American Occupational Therapy Association does not accredit or approve schools and/or courses in occupational therapy. This is a function of the American Medical Association.

 The American Occupational Therapy Association may endorse programs of instruction conducted for the orientation of the non-professional personnel (occupational therapy aides) used to assist occupational therapists in the treatment of patients.

3. Such an orientation does not indicate that the personnel so oriented are prepared in any way to treat patients without the supervision of the professional occu-

pational therapist.

4. An endorsement of an orientation program does indicate that the hospital or institution conducting such a program has chosen to follow the plan recommended by the American Occupational Therapy Association as being effective in the preparation of the non-professional personnel used to assist professional occupational therapists.

PROPOSED IN-SERVICE TRAINING PROGRAM FOR OCCUPATIONAL THERAPY AIDES

The American Occupational Therapy Association has the responsibility for determining standards of training, recognition, utilization and supervision of the nonprofessional personnel (occupational therapy aides) who assist in the administration of occupational therapy in all types of hospitals.

The training program outlined below can be adapted to prepare occupational therapy aides to work in the psychiatric, tuberculosis, chronic disease and pediatric

PROGRAM OUTLINE

I. Organization

A. Programs will be conducted in hospitals approved by the joint accreditation board of the American Medical Association and the American Hospital Association and/or the American Occupational Therapy Association.

B. Program will be under the direction of a registered occupational therapist.

C. Length of program will be a minimum of 12 weeks (460 clock hours) of didactic instruction, specialty skills and supervised practical application.

II. Prerequisites for training

A. High school graduation or passing high school equivalency.

B. Good physical health.

C. Suitable personality; mature, flexible with cooperative attitude and capacity to establish effective relation-

D. An acceptable intellectual and emotional capacity. (To be determined with suitable tests if indicated.)

III. Curriculum

A. Lecture and seminar

1. Aim, purpose and scope of course

2. History and philosophy of occupational therapy

3. Professional relationships

4. Organization and administration of

a. Hospital

b. Occupational therapy department

c. Allied disciplines

- 5. Technical material in specific medical field including terminology.
 - 6. Application of occupational therapy to include:

a. Method of referral to

- 1) department
- 2) aide
- b. Approach to patients
- c. Precautions
- d. Selection of media
- Observation and reporting of impressions of behavior reactions, physical manifestations,
- f. Supervision and guidance of aide by registered occupational therapist including clear delineation of differences in
 - 1) responsibility
 - 2) function
- 7. Group dynamics and/or interpersonal relationships

8. Specialty skills

a. those related or essential to the field for which aide is being trained.

9. Field trips

B. Practical application

- 1. Work in controlled situation
- 2. Student conferences

RECRUITMENT AND PUBLICITY COMMITTEE

The recruitment and publicity division of the American Occupational Therapy Association had its inception on November 8, 1954, by virtue of a one year grant of financial subsidy from the National Foundation for Infantile Paralysis.

The philosophy of the program and its national implications will be covered in the 1955 report of the national chairman, John D. Redjinski. Herein, we offer, as briefly as possible, an outline of the functions of the division during the period November, 1954, to November, 1955. Examination of both papers will tie the two phases, motivation and production, into a unit represent-

ing total activity.

Portions of this information have been recorded previously in several interim reports mainly, that presented at the mid-year meeting in Atlanta, Georgia, and distributed by mail to those who were not present on that occasion. It is necessary, in interest of completeness, however, to review the goals and purposes of the program along with your division's selection of responses to meet

Our goal in 1955 was "the implementation of efforts of individual OTR's, state committees and associations and professional schools for more public information and better public relations." Concentrating on these levels of organization, mechanics in wide variety were produced and specimen programs were evolved. Secondarily, both in time devoted and emphasis, were several cultivations

on a national level. These for most part will not fruit during the life span of the division under present direction. One, the establishment of an Occupational Therapy Day, February 21, was registered and appeared on the calendar of the National Chamber of Commerce. But this requires annual promotion for three consecutive years for permanency. It is suggested that with little effort this can be followed through and would produce a small but effective manner of attracting public attention to the profession.

FOR THE MEMBERSHIP

To the goal of expanding and intensifying programs instituted by the individual occupational therapist we have evidence to indicate that a degree of success was achieved this year through the following promotions:

(1) Five issues of the publication "Recruitment and Publicity Bulletin" written for and mailed to the total membership of AOTA. The copy of this piece was geared to alerting to the personal responsibility of the professional to apply personal effort to public information and public relations. The function of this publication was to bridge the gap between the national level and the individual members strictly with reference to public relations.

(2) Distribution, in form of enclosure with said Bulletin, reprints of stories which had local implications and also copies of publications of other health services on

the team, i.e., NFIP folder.

(3) Personal counseling and program construction upon request of either an individual occupational therapist or a small group thereof who desired programming tailored to local needs and facilities. This service was intended, and succeeded in stimulating activities in some unchartered areas. This made possible participation in overall goals by every occupational therapist regardless

(4) The "Speaker's Handchart" was devised and formatted to provide a common outline of major points to be included in an address on occupational therapy, in such form as to permit its use either in a prepared or extemporaneous speech. This item has been distributed to the membership too recently to permit evaluation of its effectiveness; however, the satisfaction expressed by many of the membership would indicate it is being well received.

FOR STATE COMMITTEES, ASSOCIATIONS AND SCHOOLS

For the use of groups-committees, state association and professional schools-a more intensive and instructive collection of materials have been produced. Spe-

(1) A four factor kit of general publicity and organizational mechanics has been placed in the hands of these groups. Specimen programs, suggested uses of commercial facilities for publicity and a structured outline for committee organization are parts of this kit.

(2) A five factor school kit, augmenting the general kit and projecting to the school situation exclusively has been forwarded to all school directors. One of the five factors is devoted entirely to student committee organization and its place in the schools' program for public information and public relations. A specimen program for student committee spells out function and timing of a special student promotion.

(3) Not a part of the kits but usable in the same fashion are the instructions for construction of a porta-

ble tablé-top exhibit.

(4) List of some 2,000 names of persons expressing (in correspondence with the national office) an interest in a career in occupational therapy.

Both the general and the school kits should have

value for at least three years.

PRINTED MATERIAL

New printed materials which have been written and or formated this year are as follows:

(1) A new general brochure, "Helping Others to Help Themselves" (single page, two folds).

(2) A new educational outline brochure, "How to Become a Registered Occupational Therapist" (single page, three folds).

(3) New format for "Suggested Preprofessional Curriculum" under the quoted title (single sheet, one fold). (4) Brief, "Who, What, Where, When" (single sheet,

no fold).

(5) New format order blank for available nonprofessional printed materials (single page, 1 fold perforated).

(6) New poster (81/2 x 11, two color).

All items except the poster are folded or can be folded, without damage, to fit a No. 10 envelope. The poster fits standard letter-size manila envelopes.

In addition to the items above, your division has purchased a supply of reprints of the story on occupational therapy written by Dr. A. T. Stanforth for the Progressive Farmer. The appeal of this presentation was pointed up by the receipt of nearly 1,500 inquiries as a result of reading the article. The reprints are available to the membership for distribution.

(Note: All pieces not marked otherwise are one color).

THE AREA COMMITTEES

As you have been advised previously, a new organization has been added to the national echelon. This matter has been adequately covered by memos and a review in the August issue of the Bulletin. It is our belief that the establishment of the schools and the coordinating committees which comprise the area committee for public information is the high point of national activity in the 1955 program. Not only do we feel that it meets a vital need in tieing together local activity and national programming but also that it can perpetuate many of the gains of this and future years.

Out of the initial meeting of the area committees in Topeka, Kansas, in May, 1955, came several practical plans for closer cooperation between the several levels of organization of AOTA for public relations. The division has cooperated to the extent of designing the basic mechanics for these plans in the form of a card reporting system, as directed by the committees. The following items were produced and distributed to area

chairmen of both committees:

(1) A "more information" card for use of registered occupational therapists when speaking to groups. card is to be used on all occasions when professionals produce or participate in a program of public information. The user enters his name on the form which states that further information will be available upon request. This card has been forwarded to all schools, associations and committees with covering letter explaining purpose and use.

(2) A set of cards, three in number and of two types, one for committees and associations, the other for use of the schools. These are intended to provide state chairmen with information of activities within the state, to advise the area chairman of the progress of programs within the area and in turn to report to the national chairmen. These have been forwarded with covering letters.

Distribution is so recent as to preclude any prediction of results. If the forms prove satisfactory, they should

be adequate for several years.

(3) A letterhead designed for use of the area committee chairmen is now available.

Field work. Approximately 20% of the year has

been devoted to personal contact with members, associations and schools. The following units have been visited and meetings attended:

Pennsylvania Association meeting, Philadelphia, Pennsyl-

Connecticut Association annual meeting, Stamford, Connecticut.

New York State annual meeting, New York.

Midyear meeting, Occupational Therapy Association, Atlanta, Georgia. Annual conference of Personnel and Guidance Council,

Chicago, Illinois.

Organization meeting of the area committees for public information, Topeka, Kansas.

Wisconsin Association executive committee meeting, Mil-

waukee, Wisconsin. Michigan Association annual meeting, Northville,

Michigan. Mount Mary College, Milwaukee, Wisconsin. Milwaukee-Downer College, Milwaukee, Wisconsin.

Mid-Atlantic regional conference.

Arkansas Association meeting, Little Rock, Arkansas

(scheduled). Denton State College, Denton, Texas (scheduled). Houston Association, Houston, Texas (scheduled)

Utah Association, Salt Lake City, Utah (scheduled). Colorado Association, Denver, Colorado (scheduled) Colorado Agriculture College, Ft. Collins, Colorado (scheduled).

Oregon-Washington Association, Portland, Oregon (scheduled).

University of Southern California, Los Angeles, California (scheduled).

Mills College, Oakland, California (scheduled) San Jose College, San Jose, California (scheduled). Annual meeting American Occupational Therapy Asso-

ciation, San Francisco, California (scheduled) Eight occupational therapy departments were visited.

Office activities. Certain services have been contributed by the division with a view to relieving pressure on other sections of your national office. With slight changes these items should be timely for at least one year from date.

(1) Form letter for reply to requests for general information about the profession and opportunities for a

career in occupational therapy.

(2) Form memos to accompany single and bulk requests for printed materials sent to schools, libraries and counselors. These are in form of expressing appreciation of the writer's interest.

(3) New format for two portable exhibits.

Requests answered	12,164
General mail	2,743
Membership mailin	g22,465
Bulk mailings	951
Estimated number	of pieces distributed71,265

SUMMARY

To summarize . . . our numerical goal for this year was 4,000 new students to be enlisted. On this point we regret to advise that despite appeals to all groups to report their successes, we have a record of only 13 new students for the period. We realize that this is in no way a report to you of what has actually come of all the efforts of the 4,000 registered occupational therapists, 30 schools and 42 committees. However, for the sake of completeness, we include it herewith.

It is impossible to conclude this paper without mention of the appreciation of the personnel of your recruitment and publicity division this year for the many kindnesses of the membership of American Occupational Therapy Association, for your cooperation, your interest, your counsel and your generous acceptance of our planning and productions,

Respectfully submitted, D. M. Lehman, Director Wm. P. Bowser, Secretary.

EDITORIAL REPORT

During this coming year emphasis should be on improving the quality of professional material in the American Journal of Occupational Therapy. It is hoped more writers from more fields will write so a more even distribution of area material will be available.

It is also recommended that committee and delegates' reports be made more succinct and pertinent to all readers by discussing aims and progress made rather than outlining details necessary for the individuals concerned but of little interest to the general membership.

To save space but not depreciate value, a more concise heading for book reviews will be adopted with the 1956 volume.

More emphasis is to be placed on program and speakers for the coming conference with less space devoted to feature stories about the local committee. The latter will be publicized in the Newsletter.

During the past year, the editor wrote the schools urging more attention be given to literary style and usage of words. Since our reports and observations are a vital part of our inter-departmental contacts, ability to write articulately but simply is vital to our professional growth. As a result of this letter, the University of Wisconsin added six more credits of English to their curriculum, and it is hoped all schools are emphasizing succinct but descriptive writing in all their classes.

Lastly our advertising pages should not be forgotten when considering improvements in the Journal. These can be increased with more and bigger ads by a consistent support of these advertisers by every occupational therapist.

The first denary age of the Journal will be completed at the end of 1956. It is hoped we can complete our initial cycle in a burst of glory which will lead the way for a bigger and better future.

> Respectfully submitted, Lucie Spence Murphy, O.T.R. Editor

LEGISLATION AND CIVIL SERVICE COMMITTEE

During the past year there was completed a survey and follow-up of 64 merit system and civil service offices. Most of these offices are located in the state and county divisions of government and consequently relate to occupational therapists working in the hospitals under the jurisdiction of those political divisions. Few occupational therapy positions within the education field are set up directly under the state and county civil service departments, and hence, were not a part of the survey. In addition, private agencies were not included in this survey. A few observations may be noted from the questionnaires:

1. The assignment of the occupational therapy classes in nearly all areas are within the welfare departments or institutional divisions.

2. The majority (52%) of the offices required a written and/or oral examination of applicants applying for occupational therapy positions. However, one-third of the offices rated the applicants on the basis of education and experience, i.e., unassembled examination. The other offices (15%) require oral and written examinations as well as the unassembled examination.

3. In practically all instances the appointment leads to permanent status preceded by an initial probationary period of six months to a year.

4. Average monthly salary ranges for the various levels are as follows: Grade I, \$276-343; Grade II, \$325-405; Grade III, \$368-461; Grades IV, V, VI, \$459-564. The reported lowest entry salary was \$180 per month and the highest maximum was \$741 per month. Note: These salaries are now over one year old and are undoubtedly low when equated with other professions and with industry. More recent indications disclose a minimum entry salary of \$300 per month.

A follow-up letter was sent to each of the merit system and civil service offices thanking them for their participation and assistance. Also, included with each letter was a reprint of the compiled information (each area coded) gathered from the survey. In each case, the coded area number of the addressee was identified. This information was published in the American Journal of Occupational Therapy, Vol. IX, No. 1, January-February, 1955.

The matter regarding the payment of occupational therapy charges for patients under Blue Cross—Blue Shield plans has been called to the attention of this committee. In one area (New Jersey) it appears the treatment fees for occupational therapy are excluded from the plan. A second area (Nebraska) also excludes the occupational therapy fee but in the future may be included within the "extended benefits" coverage. A third area (one hospital in Minnesota) reports that fees are routinely included as part of the charges for in-patient hospital services.

It appears that each Blue Cross—Blue Shield Chapter develops independent plans resulting in some dissimilarities.

This committee had planned, in conjunction with the survey questionnaire, to draft a model job description and/or classified specification for occupational therapy. However, time did not permit further development along this line as most of the effort was devoted to compiling general information from the questionnaire.

The Bolton amendment to the Army and Navy Act of 1947 was recently signed by the President and became law. Mrs. Bolton's (Rep. from Ohio) amendment now makes it possible for male occupational therapists to receive commissions in the Army, both active and reserve appointments. Information regarding such appointments may be secured through the procurement officers in each of the Army district headquarters.

A number of letters were received by the committee asking for general information. These were promptly answered.

Future considerations:

1. Increase the recommended entry salary of a staff therapist from its present \$3500 to \$3700. Likewise, increase the director from \$5000 to \$5400. Re: Administrative Practices and Personnel Policies as recommended by the American Occupational Therapy Association.

2. Follow the development of Blue Cross—Blue Shield plans for possible inclusion of fees for occupational therapy.

3. Proceed with the drafting of a model job description for occupational therapy. There appears to be a need for a guide which would materially assist personnel officers and occupational therapists to more adequately outline duties, responsibilities, scope of the position(s) and similar matters.

4. Give consideration to incorporate within the national office a division or unit having the express function of handling legislation and civil service matters for the Association. It is understood by this committee that little time can be devoted to committee work by the practicing occupational therapist. For the most part, geographic

distances and other communication factors prevent the consummation of important matters. This would not necessitate the dissolution of the legislation and civil service committee as a standing committee of the Association but rather enhance its function by centralization of the work.

The committee has appreciated the opportunity of serving the Association and working with the many offices in helping to further promote the practice of occupational therapy. It is hoped that future work done through legislation and civil service will not only help the individual occupational therapist in his work situation, but also, find the individual patient receiving the best possible treatment. Legislation and civil service matters reflect upon us all.

Respectfully submitted, Laurel V. Nelson, O.T.R., Chairman,

EDUCATIONAL SECRETARY'S REPORT

The following summary covers the activities of the education office since the last report presented at the midyear meeting with the exception of those concerning the registration committee and the registration examination. Complete reports on the latter are contained in the annual report of the registration committee.

Report of Performance in Student Affiliations. A study on the use of the new report on student performance was initiated on January 1, 1955, when this form went into official use. At the request of the committee on student affiliations, an interim report based on an analysis of 350 report forms was forwarded to all directors of clinical affiliation centers to re-interpret the principles and procedures to be used in rating students on this new form.

In order to furnish the schools with a more reliable letter grade conversion table, a further analysis was made when 775 report forms had been received in the national office. The forms came from 29 schools in sufficient numbers to cover all the major disability areas. The results of this study are as follows:

1. The means and standard deviations for the five major disability areas were sufficiently close to warrant the utilization of a single over-all distribution of all 775 cases.

2. There were no outstanding differences among the disability areas to warrant separate consideration in regard to the distribution and use of the NA column.

3. The over-all frequency distribution was examined for its approximation to the normal curve. Checks were made at both ends and in the middle of the distribution. In each instance, the approximations were, for the most part, within 1 to 2% of the normal curve. It was, therefore, felt that a satisfactory letter grade conversion table could now be derived.

4. Two distributions of RPSA scores were drawn for the two administrations of the registration examination this year. Further discussion in regard to these results are detailed in the report of the registration committee.

It was requested by the education committees at the 1955 midyear meetings that a complete, detailed report on the first full year's use of the RPSA be presented at the 1956 midyear meeting. The study of this report form will therefore be continued until that time.

form will therefore be continued until that time.

Area Analysis and Relative School Standing. The
analysis of student performance on the four examinations
administered in 1954 and 1955 was continued to determine the relative standing of each school on the written examination and to obtain the percentage of error
made by the students of each school in the subject matter
areas covered.

All of the above material is coded so that each school

knows how it stands in relation to the others but does not know how any one school in particular is ranked. A new code was initiated this fall to take care of current and future increases in the number of schools.

All of the above studies were made, as a special service to the schools, by the educational research consultant to the AOTA, Dr. Hyman Brandt.

Special Services. The area analysis and relative school standing as reported to the schools as a special service have covered a two-year period (four examinations) to insure greater reliability of the data. Consideration of the increase in the number of examinees over the past year or two has raised the question of whether certain changes in the present procedure might not be of greater value to the schools. Therefore, possible changes were presented to the schools for their consideration and approval.

A majority of the schools indicated a preference for individual area analyses for each examination and for receiving reports on school standing and area analysis annually. Upon final approval of this procedure, the education office will begin, with the 1956 examinations, to report to the schools once a year. The report will include the relative school standing for each examination and the area analysis of two examinations combined.

Scholarships. Lists of undergraduate and graduate scholarships available for occupational therapy students and registered occupational therapists are now available from the national office upon request. These lists were also published in AJOT (Volume IX, number 5, Part I, 1955).

In addition, four \$300 undergraduate scholarship awards have been granted by the Daughters of Union Veterans of the Civil War to the Boston School of Occupational Therapy, Colorado A. & M. College, Michigan State Normal College, and the University of Southern California.

Schools and Clinical Centers Visits. Since the 1955 midyear meetings the educational secretary has had the opportunity of reporting on the use of the RPSA at the Richmond Professional Institute meeting of clinical training directors and at the OT student affiliations councils of Columbia University, New York University and the University of Pennsylvania. Clinical centers visited include: Highland View Cuyahoga County Hospital, Veterans Administration Hospital in Augusta, Georgia, and the U. S. Army Hospital, Camp Gordon.

Prospective New Schools. Boston University has developed a curriculum in OT in accordance with the AMA Essentials. The Medical College of Georgia and Western Reserve University has been visited in regard to the possible establishment of OT courses. Inquiries indicating an interest in establishing occupational therapy curricula have been received from the Florida State University, the University of Florida, Rawlins College, Indiana University, Ball State Teachers College, Mississippi Southern College and Washburn University.

Institutes. In addition to consulting with the chairmen of the 1955 and 1956 AOTA institutes, the educational secretary has served as a member of the planning committee for the 1955 and 1956 OT institutes sponsored by the American Hospital Association, the institute for school and clinical directors held last June in New York City sponsored by the OVR and the conference planned for 1956 under the sponsorship of the National Institute for Mental Health.

Cooperation with Committees. The educational secretary has served as ex-officio member on the following committees: AOTA council on education and its committees, special committee on training of foreign personnel, National Research Laboratory committee and the AOTA scholarship committee. She is also a member of the National Health Council committee on education.

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The education office has also been cooperating with the committee on personnel shortages by obtaining for them pertinent information relative to school enrollment and faculty-student ratios in our schools.

Other Activities. Along with the above activities and those of the registration examination, the education office has: 1) interviewed prospective students, foreign students and foreign visitors interested in the development of OT programs in their countries (Brazil, Denmark, Germany, India, France); 2) advised with registered occupational therapists relative to graduate studies; 3) consulted with representatives of the AMA in regard to OT schools; 4) carried on correspondence with clinical directors planning to develop student affiliation programs; and 5) other general duties associated with the education office.

Sincere appreciation is expressed to the chairmen and members of the various education committees, the Board of Management and executive director for their support and cooperation during the past year.

> Respectfully submitted, Mary Frances Heermans, O.T.R. Educational Secretary

REGISTRATION COMMITTEE

The registration committee held ten meetings during the past year in preparation for the February and June, 1955, examinations. In addition, two meetings have recently been held for discussion of policy and procedures and work on the February, 1956, examination. drawn for the RPSA's submitted for the two administrations of the examination this year along with corresponding distributions for the OTR's. After a conversion table was developed to convert RPSA scores to CTR scores, a distribution for all student affiliations was obtained.

The conversion table, developed from 154 RPSA's for the February examination, has proved itself to be quite stable. The data for 723 RPSA's for the June examination indicated that the February conversion was completely in line with the June distributions. The same conversion table has been used for both examinations.

Thus, those students who received RPSA scores have not been penalized in their registration examination standings as against those whose student affiliation grades were made up exclusively of CTR scores.

Registration Examination for Graduates of Puerto Rican Schools. All instruction is given in Spanish at the School of Physical and Occupational Therapy in Santurce, Puerto Rico, which has been approved by the American Medical Association. Therefore, with the approval of the AOTA Board of Management, a registration examination in Spanish will be administered to graduates of this school in order that they have equal opportunity to become registered occupational therapists.

Item Writing. An intensive drive for new registration questions will be initiated early in 1956. With the approval of the Board of Management, writers are to receive payment for each acceptable item submitted to the registration committee.

We wish to extend sincere appreciation to the mem-

					TABLE I					
Г	ate		Number of Examinees		rt I Sigma	-	t II Sigma		tal Sigma	Correlations of Parts I & II
Feb.	1954		243	89.79	13.90	89.70	13.89	179.53	26.5	80
Tune	1954		284	85.55	14.76	85.10	14.73	169.97	28.1	.84
Feb.	1955	***************************************	270	86.15	14.95	87.43	14.71	175.42 (240	28.3 cases)	.83
June	1955		332	87.34	14.15	87.67	14.87	176.38	26.2 cases)	.84

June, 1955, Registration Examination. The June, 1955, registration examination was administered for 332 examinees from 25 schools as well as from the Astley-Ainslie Training College, London OT Centre and Training School, University of Toronto and the Mississippi School of OT. This examination was administered in 24 approved schools and in 21 other colleges or universities.

Comparative Data, The statistics for the 1955 examinees in comparison with those who wrote the examination in 1954 are listed in Table I.

The following comparison of the total number of examinees gives an indication of steady increase since the first objective type of examination was administered.

1949—358	1953-454
1950-390	1954-527
1951-438	1955-602
1052-469	

Student Affiliation Report Forms. With the new official report on performance in student affiliations (RPSA) going into effect on January 1, 1955, examinees began to have two types of report with totally different scoring systems to be computed as 20% of the total registration examination grade. For the February examination the preponderance of report forms were the old official clinical training report (CTR). For the June examination approximately one-half of the reports submitted were the new RPSA's.

It was therefore necessary to have two distributions

bers and consultants of the registration committee, to item writers and to the Board of Management for all contributions and assistance to the registration examination during the past year.

Respectfully submitted, Mary Frances Heermans, O.T.R. Chairman, Registration Committee

COUNCIL ON EDUCATION

It is of interest to know that there are at present thirty schools of occupational therapy in this country. Two of these, Texas and North Dakota, are not yet old enough to have graduating students, and the Army School is at present deactivated; therefore, twenty-seven schools are actively graduating students this year.

schools are actively graduating students this year.

Figures collected by the committee on schools and curriculum show the following figures:

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Total students enrolled	November, 1954246	1
Total students enrolled	October, 1955259	3
Total graduated	1955 54	7
Anticipated graduates	1956 45	0

This indicates that, in spite of our publicity and recruitment efforts, our total enrollment has increased only 132, and our graduates this year will number 97 less than last year. No new schools have been opened this year, but several are under consideration.

Personnel needs in the paramedical fields have been studied during the last six months by a special committee of the health advisory council of the Office of Defense Mobilization. Based on all available figures, this committee estimates that there will be 3900 occupational therapists available in 1956 with a need of 10,-500, a shortage, therefore, of 6600. It is obvious that we desperately need continued and increased recruitment.

The education committees have been very active during the past year. There has been complete reorganization of the various groups into the council on education with eighteen members; the committee on schools and curriculum; the committee on student affiliations; the committee on graduate study; and, as of this meeting, the committee on scholarships. The chairman of each of these committees, together with the vice-chairman and secretaries of the committees on schools and curriculum, student affiliations, and graduate studies, plus four additional members elected, two each, by schools and curriculum and student affiliations, together with the president, the executive director, and the educational secretary, ex-officio, constitute the council on education.

The manual for school directors and the student manual have been revised, and revisions are in progress on the clinical practice director's guide. Work has continued on the evaluation of occupational therapy departments, and the proposed essentials of an acceptable curriculum leading to a master's degree in occupational therapy have been revised.

Considerable stimulus has been given to our educational programs by grants from the U. S. Office of Vocational Rehabilitation. Fifteen schools have received such assistance primarily for additional personnel and equipment. A grant was also given for the institute: "A Reassessment of Professional Education and Practice in Occupational Therapy as Related to Rehabilitation," which was held in New York in June, 1955. This was an intensely interesting meeting attended by the directors or representatives of all the schools and by thirty selected directors of clinical practice centers. It is planned to expand the benefits derived from this meeting by local institutes geographically distributed throughout the country.

There are many plans for the future. Further work is to be done on the American Medical Association Essentials for Acceptable Schools of Occupational Therapy and the Standards for Education of the American Occupational Therapy Association. Work will be continued on the evaluation of departments, and plans are being formulated for evaluation and inspection of school programs as a joint project of the American Medical Association and the American Occupational Therapy Association.

There is a great need for further study on the graduate level and for research. All members of the Association are urged to inform the national office in regard to any study projects which they may be undertaking. Advantage should also be taken of the opportunities for fellowships through the National Foundation for Infantile Paralysis for preparation for teaching.

With the change in president, all committees are dissolved; therefore, at this time, I wish to express my very deep thanks to Mrs. Dobranske, for her chairmanship of the committee on schools and curriculum; to Miss Faeser, for her chairmanship of the committee on student affiliations; to Miss McNary, for her wise and helpful guidance; to Miss Fish and Miss Heermans, for their unfailing assistance; and to all the many persons who have worked hard and faithfully on the many special committees and projects which have helped in the work and progress of our educational council and committees. It has been a privilege to work with you and my greatest pleasure to be of service to you.

Respectfully submitted, Helen S. Willard, O.T.R. Acting Chairman, Council on Education

DELEGATES DIVISION

TENNESSEE

Delegate-Reporter, Nancy L. Rice, O.T.R.

The T.O.T.A. has had a marked redistribution of membership during the past year and as a result we find that a revision of the constitution will be necessary. A committee has been appointed for this purpose and the suggested changes will be presented at the first state meeting to be held at Nashville in November. When the T.O.T.A. was organized in 1949 the membership was concentrated in the western portion of the state. Our present eighteen members are located from Knoxville to Memphis, an area some five hundred miles in length. The first step toward maintaining our consolidation was taken at the annual meeting in May when it was voted to have two state meetings each year, one in the fall in addition to the previously scheduled annual meeting in the spring. The three major centers, Knoxville, Nashville and Memphis continue to have meetings monthly and business is coordinated through correspondence.

A newsletter has been initiated this year and is being enthusiastically accepted and proving most helpful for distribution of information.

Through the publicity and personal efforts of members of the T.O.T.A. during the past two years, sufficient interest has been stimulated to bring about the orientation of a pilot program of occupational therapy in the State tuberculosis hospitals. The Tennessee T.B. Association has sponsored the program, having begun in one hospital with a therapist on a half time basis. It has proved so beneficial that plans are being expanded to include the other hospitals.

OFFICERS

President	Carolyn Aggarwal,	O.T.R.
	Nancy Vail,	
2nd Vice President	Charlotte Staub,	O.T.R.
Secretary	Phyllis Kramer,	O.T.R.
Treasurer	Anna Loftus,	O.T.R.
Delegate	Nancy L. Rice,	O.T.R.
Alternate Delegate	Nancy Vail,	O.T.R.

FLORIDA

Delegate Reporter, Lois Anne MacDonald, O.T.R.

Orientation and education in occupational therapy for allied professional personnel and lay public in Florida, has been one of the broad aims of the three year old Florida Occupational Therapy Association. Though the membership is somewhat limited in numbers, each member is a hard working therapist, acquainting others with the profession, first of all, by means of jobs well done. Publicity has been gained by newspaper articles, by a fine color film being finished at the United Cerebral Palsy Association clinic in Miami, by means of combining our meetings with those of other allied groups, by using the Army film "Introduction to Occupational Therapy" in hospital staff and practical nurses' classes, by participating in hospital day displays, and by continuing recruitment activity in high school Career Days and in numerous personal contacts.

The first meeting of the year was held at the Central Florida Tuberculosis Hospital, Orlando, Florida, where Dr. Brooks, of the staff, reviewed the progress of treatment of tuberculosis. Dr. Nila Covalt, the guest for the afternoon session, presented an interesting program including films of work done at the Hospital for Chronic Illness, Rocky Hill, Connecticut, and her plans for the Central Florida Rehabilitation Center. Later, an invita-

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tion was extended to Dr. Covalt to become a member of FOTA as a Fellow. She accepted.

During the business meeting it was necessary to elect a delegate to fill the unexpired term of office left vacant when Mrs. Pearl Tennyson left Florida in November, 1954, to return to Mississippi. Lois Anne MacDonald was elected delegate and Mrs. Alpha Lewis alternate delegate. It was reported, at this time, that the scholarship fund had grown considerably due to sales of screw drivers.

In October, the FOTA met in conjunction with the Florida Children's Commission at Daytona Beach. The purpose of the meeting was to present the administrative problems and to foster the team approach in the care of the exceptional child. An occupational therapy demonstration and a film were presented and the therapists took part in various small interest-group discussions. The FOTA met afterward in the Junior Service League Orthopedic Center and saw evidence of outstanding work being done there.

The FOTA and Veterans Administration Center, Bay Pines, greatly regretted to learn that Mrs. Susan Linsin is not able to actively carry on her work due to serious illness. She has served as president of FOTA during its first three years of existence and as chief of occupational therapy at Bay Pines since November of 1954. A project in which Mrs. Linsin has been deeply interested, during the past year, is the possible planning for a school of occupational therapy in Florida.

OFFICERS

President	Susar	Linsin,	O.T.R.
Vice-President	Christina	Kimball,	O.T.R.
SecTreas	Florence	Walters,	O.T.R.
DelegateLois	Anne M	acDonald,	O.T.R.
AltDelegate	Alı	ha Lewis.	O.T.R.

NEW YORK

Delegate-Reporter, Florence M. Stattel, O.T.R.

The New York Occupational Therapy Association had a busy year, with efforts distributed to meet the existing and current needs. Major attention was devoted to the implementation of district formation,

The 203 members of the association have been kept informed of the activities of NYOTA through a bulletin which was published in five issues. The August issue was devoted to the "Report of the President" and contained a composite picture of association activities for the year. One of the highlights of this report, was the report of the scholarship committee. The sum of \$1,100 was made available to students at Columbia and New York Universities, the distribution was \$500 in grants, and \$600 in loans. The ways-and-means committee added \$200 to the scholarship fund and broadened the educational horizon by presenting a course for graduate therapists on "Splints and Gadgets." Under the sponsorship of the NYOTA two courses for OT volunteer assistants were offered.

In the matters of job exchanges, the committee is making a survey to determine if vacancies could be filled by part time occupational therapists. A contact will then be made with registered non-practicing OT's to find out if they would consider part time work. It is an attempt, on a local level, to meet the personnel shortage. The personnel policy committee is conducting a survey of salaries and reviewing recommendations on personnel policy. The recruitment committee has been active in contacting all guidance counselors in New York City and informing them of recruitment services available through NYOTA. Persons or groups interested in securing information on occupational therapy,

had available the following services of the recruitment committee; packet project, speakers bureau, field trip, personal contact, exhibit and health career conferences. The program committee presented, among other interesting sessions, a joint physical therapy and occupational therapy panel program meeting on the "Adolescent Crisis in Cerebral Palsy" which was most successful. The two professions at present are formulating plans for a joint meeting at a conference on "World Rehabilitation" which is to be held at the United Nations in 1956. Under the sponsorship of the United Hospital Fund, the NYOTA is working on an institute to be held on "Prevocational Evaluation in Occupational Therapy."

vocational Evaluation in Occupational Therapy."

The report of the Long Island OT district indicated an active and successful year. The provisional district of Long Island is represented on the Board of the NYOTA and close liaison exists. The Long Island OT district was host to the NYOTA at the annual meeting in May held at the Northport VA Hospital and a stimulating program was presented.

The formation of districts has been accepted by the NYOTA and the Rochester OT Association. Both associations, now seated in the House of Delegates, will lose their identity as an association and will become districts. They along with the other groups, as the L. I. OT district will form the state association which will have representation in the House of Delegates. Implementation of this plan is now in process and all occupational therapists concerned have been informed of the progress. A meeting is scheduled in January in Utica, so that all groups already organized in provisional districts and those interested in the formation of a district are invited to attend to discuss the formation and implementation of districts. It is sincerely hoped that by 1956, the formation of districts will be an accomplished

The Medical Advisory Board of the NYOTA were consulted on the question of non-registered personnel and provided helpful recommendations which were guides for the associations on their thinking. With this final report your reporter respectfully submits this report.

OFFICERS

President	Claire S. Gl.	asser, O.T.R.
Vice-President	Agnes	Ness, O.T.R.
Secretary	Joan Ho	lder, O.T.R.
Treasurer	Fred	Erb, O.T.R.
Delegate	Florence St	attel, O.T.R.
Alternate delegate	Frieda Be	ehlen, O.T.R.

Realism . . .

(Continued from page 10)

Dispensing with arts and crafts is as unfruitful for the profession and the patient as an incorrect evaluation of the term "realistic." In a machine age, man is in danger of becoming lost. Consider new ways of applying old arts as well as new industrial equipment, if a contribution is to be made toward his habilitation or rehabilitation

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SCHOOLS OFFERING COURSES IN OCCUPATIONAL THERAPY

Name of School	Name and Address of Director	Tuition	Type of	Entrance Requirements	Classes	Length of Course	Stuc	Students M F	Enrollment
Boston School of Occupational Therapy Affiliated with Tufts University.	Mrs. John A. Greene, President Boston School of Occupational Therapy, Tarcourt Street Boston 16, Massachusetts	a. \$750/acad. year g200 clinical \$200 clinical \$750/acad. year year \$750 acidical affiliations	a. Post Degree Course (Diploma) b. Degree (B.S. In Education) from Tutts plus B.S.O.T.	*a. College degree or accredited profes- sional training b. As for the College; qualified transfer student (Soph, and Jr. years)	a. Sept.	a. 1 acad. yr. plus 10 mos. clinical affiliations. b. 4 acad yrs. plus 10 mos. clinical affiliations	Yes	# A	981
Buffalo, University of School of Medicine	Asst. Prof. Nancie B. Greenman, O.T.R., Director of Program in Occupational Therapy, University of Buffalo, 2188 Main Street, Buffalo 14, New York	a. \$600/acad. year \$90 clinical affiliations b. As above	a. Degree (B.S. in O.T.) from School of Medicine b. Advanced Standing (Certificate) from School of Medicine	a. As for the University: qualified transfer student b. College degree	a. Sept., Feb.	a. 4 acad. yrs. plus 9 mos. clinical affiliations b. 1 acad. yr. plus 9 mos. clinical affiliations	Yes	\$	18
Colorado Agricultural and Mechanical College School of Home Economics	Asst. Prof. Marjorle Ball, O.T.R. Director of Occupational Therapy, School of Home Economics, Colorado Agricultural and Mechanical College, Ft. Collins, Colo.	a. \$183/acad. year year (\$423 for out-of-state residents) \$25 cinnical affiliations b. As above	a. Degree (B.S. plus certificate) b. Adv. standing certificate	a. As for College; qualified transfer student b. College degree	a. Sept. b. Any quarter	a. 4 acad. yrs. plus 10 mos. clinical affiliations b. 1 acad. yr. clinical affiliations	Yes	Yes	346
Columbia University College of Physicians and Surgeons	Asst. Frof. Marle Louise Franciscus, O.T.R. Director of Training for Occupational Therapy Columbia University, College of Physicians & Surgeons, 630 West 188th Street New York 32, New York	a. \$750/acad. year \$10 clinical affiliations b. As above	a. Degree (B.S.) from Facuity of Medicine b. Advanced Standing (Certificate)	*a. 2 yrs. College *b. College degree or accredited professional training	a. Sept.	a. 2 acad. yrs. plus 9 mos. clinical affiliations b. 1 acad. yr. plus 9 mos. clinical affiliations	Yes	3	2
Diinols, University of College of Medicine	Assoc. Prof. Beatrice D. Wade, O.T.R. Head, Prepartment of O.T. University of Illinois 1853 West Polk Street Chicago 12, Illinois	locada yr.) (acad yr.); 135 for Illinois residents 2356 for out-or- State residents In Chicago (16 months); 1522 for Illinois residents Illinois 154 for out-or- 154 for out-or- 154 for out-or- 154 for out-or-	Degree (B.S. in O.T.) from College of Medicine	As for the College of Liberal Arts	Seb.	3 acad, yrs. Liberal Arts College, 15 mos. College of Medicine and etinical affiliations	Yes	Yes	8
lowa, State University of College of Liberal Arts and College of Medicine	Asst. Frof. Elizabeth Collins, O.T.R. Director of Occupational Therapy College of Medicine, State University of Iowa, Iowa City, Iowa.	\$204/acad. year \$424 for out- of-state residents	Degree (B.A.) from College of Liberal Arts, plus Certificate from Medicine	"As for University	Sept	4 acad. yrs. plus 10 mos. clinical affiliations	Yes	Yes	89

Name of School	Name and Address of Director	Tuition	Type of Course	Entrance Requirements	Classes	Length of Course	M	Students	Enrollment
Kalamazoo, School of Occupational Therapy of Western Machigan College of Education	Assoc. Prof. Marion R. Spear O'T.R., Director of Occupational Therapy Kalamazoo School of Occupational Therapy of Western Michigan College of Education	a. \$140/acad. year \$215 for out-of-state residents b. As above c. As above.	a. Degree (B.S. with major in O.T.) plus diploma b. Advanced (Diploma) c. Graduate (M.A.)	a. As for the College; qualified transfer student b. Degree c. O.T.R. with college degree	a. Sept. b. Sept. c. Sept. Feb.	a. Approximately 5½ aced, 17s. 5½ aced, 17s. plus 9 mos. clinical affiliations b.2.3 semesters plus 9 mos. clinical mos. clinical mos. affiliations affiliations c. 30 semester hours	Yes	es F	181
Kansas, University of	Assoc. Prof. Frieda Congello, O.T.R., Director of Occupational Therapy, University of Kansas Lawrence, Kansas	\$170/acad. year year \$322 for out- of-state \$13.50 per clinical \$111.50 for out- \$21.50 for out- \$21.50 for out- students	Degree (B.S. in O.T.)	As for the University; qualified transfer student	Sept. Feb.	4 acad, yrs. plus 12 mos. clinical affiliations	Yes	Yes	122
Eastern Michigan College	Asst. Prof. Frances Herrick, O.T.R. Director of Compational Therapy Coccupational Affolian College Ypsilanti, Michigan	\$180/acad. year \$275 for out- of-state students	Degree (B.S. with major in O. T.)	*As for College	Sept. Feb. June	4 acad. yrs. plus 9 mos. clinical affiliations	Yes	Yes	102
Mills College	Mrs. Ivabelle B. Rhodes, O.T.R., Lirector of Occupational Therapy Mills College Oskland 13, California	a. \$800/acad. year year \$120 clinical affiliations b. \$350/acad. year year \$120 clinical affiliations	a. Degree (B.A. with major in O.T.) b. Advanced standing (Certificate)	a. As for the College; qualified transfer student b. Degree from accredited college	a. Sept. b. Sept.	a. 4 acad. yrs. plus 11 mos. clinical mos. affiliations b. Approximately 2-3 semesters plus 11 mos. clinical affiliations	No	Yes	E- 64
Milwaukee-Downer Joilege	Prof. Henrietta McNary, O.T.R. Director, Department of Occupational Therapy Milwaukee-Downer College 2512 East Hariford Are. Milwaukee 11. Wisconsin	a. \$400/acad. year \$50 clinical affiliations b. As above	a. Degree (B.S. with major in O.T.) b. Diploma	*a. As for College; qualified transfer student *b. As above plus 1 yr. college or professional training; qualified transfer student	a. Sept.	a. 4 acad. years plus 10 mos. clinical affiliations b. 2 acad. yrs. plus 10 mos. clinical affiliations	No.	Yes	130
Minnesota Sciences Medical Sciences	Ass't Prof. Borghild Hansen, O.T.R. Director of Occupational Therapy University of Minnesota Minnespolis, Minnesota	\$201/acad. year for out- \$450 for out- of-state students \$222 clinical affiliations \$336 for out-of- state students	Degree (B.S. in O.T.)	years Arts College; qualified transfer student	Sept.	3½ acad. yrs. plus 10 mos. cinical affiliations	Yes	Yes	88
Mount Mary Cellege	Sister Mary Arthur, O.T.R. I irector of Occupational Therapy Mount Mary College Milwaukee 10, Wisconstn	\$300/acad.	Degree (B.S.) plus Certificate	As for the College; qualified transfer student	Sept.	4 acad. yrs. plus 9 mos. clinical affiliations	ON	Yes	76

Name of School	Name and Address of Director	Tuition	Type of Course	Entrance Requirements	Classes	Length of Course	M	Students M F	Enrollment
New Hampshire, University of College of Liberal Arts	Miss Ruth McDonald, O.T.R. Supervisor of Occupational Therapy Curriculum University of New Hampshire Durham, New Hampshire	\$300/acad. yr. \$600 for out-of- state students \$72 clinical affiliations \$162 for out-of- state students	Degree (B.S. with major in O.T.) plus Certificate	*As for the University	Sept.	4 acad. yrs. plus 10 mos. clinical affiliations	Yes	Yes	16
New York University School of Education	Assoc. Prof. Frieda J. Behlen, O.T.R. Director of Cocupational Therapy Curriculum New York University Washington Square New York 3, New York	a. \$800/acad. year \$175 cinical affiliations b. As above c. As above	a. Degree (B.B.) plus Certificate b. Certificate c. Graduate	*a. As for the University; qualified transfer student b. Undergraduate degree c. O.T.R. or eligible for O.T.R. with	a. Sept., June June b. As above	a. 4 acad, yrs., plus 10 mos. clinical clinical affiliations. b. 1% acad, yrs. plus 10 mos. clinical affiliators affiliators c. 1 acad. yr.	Yes	Yes	128
Onio State University College of Education	Miss Barbara Locher, O.T.R. Chairman, Occupational Therapy Department, The Ohlo State University, Columbus 10, Ohlo	\$189-\$252 for Ohio residents \$444-\$592 for out-of-state residents	Degree (B.S. in O.T.)	*a. As for the University; qualified transfer student	Sept. Jan. March	10 quarters plus 10 months clinical affiliations	Yes	Yes	20
Pennsylvania, University of School of Auxiliary Medical Services	Prof. Helen S. Willard, O.T.R. Director, Philadelphia School of Occupational Therapy, 419 South 18th Street, Philadelphia 46, Pennsylvania.	a. \$800/acad. year \$100 clinical affiliations b. As above	a. Peeree (B.S. in O.T.) plus Certificate of proficiency b. Certificate (Certificate of proficiency)	• As for the University; qualified transfer student •b. College degree	a. Sept.	a. 4 acad. yrs. plus 10 mos. clinical affiliations b. 1 acad. yr. plus 10 mos. clinical affiliations affiliations	Yes	Yes	88
Physical and Cecupational Therapy, School of Affiliated with the University of Puerto Rico	Miss Carmen P. Ferez, O.T.R., Senior Supervisor of Occupational Therapy, School of Physical and Occupational Therapy, Professional Building, 8th floor, Santurce, Puerto Rico	Puerto Rican students under government scholarship Non-residents special arrangements	Diploma in O.T. and P.T.	Minimum of 2 yrs. college with B or 2.5 index	Sept	34 months	Yes	Yes	0\$
Puget Sound,	Asst. Prof. Shirley Bowing, O.T.B. Director of Curriculum in Occupational Therapy College of Puget Sound Tacoma 6, Washington	a. \$450/acad. \$100 clinical affiliations b. As above c. As above	a. Degree (B.S. in O.T.) plus certificate b. Certificate c. Advanced Standing with certificate	a. As for the College; qualified transfer student b. 1 year college (30 semester credits) c. College degree	a. Sept., Jan. b. Sept., Jan. c. June	a. 4 acad. yrs. plus 9 mos. b. 2 acad. yrs. plus 9 mos. clinical affiliations c. 21 mos.	Yes	Yes	2
Richmond Professional Institute of the College of William and Mary	Miss H. Elizabeth Messick, O.T.R. Director, School of Occupational Therapy Professional Institute Richmond Professional Institute	a. \$230/acad. \$281 \$282 \$282 \$182 \$135 cinical \$4113 cinical \$4111ations b. As above c. As above	a. Degree (B.S. in O.T.) b. Certifi- cate cate Standing	a. As for the College; qualified transfer student b. I year college (30 semester credits)	a. Sept.	a. 4 acad. yrs. plus 9 mos. clintesl affiliations b. 2 acad. yrs. plus 9 mos. c. 1 acad. yrs. plus 9 mos. c. 1 acad. yr. plus 9 mos.	Yes	Yes	88
			(Certifi-			clinical			

Name of School	Name and Address of Director	Tuition	Type of Course	Entrance Requirements	Classes	Length of Course	Students		Enrollments
Saint Catherine, College of	Sister Jeanne Marle, O.T.R. Director of Occupational Therapy The College of Saint Catherine St. Paul 1, Minnesota	\$300/acad. year \$30 clinical affillations	Degree (B.S.)	"As for the College; qualified transfer student	Sept., Jan., March	4 acad. yrs. plus 9 mos. clinical affiliations	No	Yes	3
San Jose State College	Assoc. Prof. Mary Booth, O.T.R. Head of Department of Occupational Therapy San Jose State College, San Jose 14, California	a. \$45/acad. year \$30 clinical affiliations b. As above	a. Degree (B.A.) b. Advanced Standing (Certifi- cate)	a. As for College b. College degree	a. Sept. Feb. b. As above	a. 4 acad, yrs. plus 9 mos. clinical affiliations b. Minimum 1 yr. acad, plus 9 mos. clinical affiliations	Yes	Yes	185
Southern California, University of College of Letters, Arts and Sciences	Miss Angeline A. Howard, O.T.R., Head of Department of Occupational Therapy, University of Southern California, Box 274, Los Angeles 7, California	a. \$600-720/acad. \$78a clinical affiliations b. As above c. As above	a. Degree (B.S.) plus plus b. Gerthiate Certhiate Standing Certificate C. Graduate (M.A.)	*a. As for the University b. College degree c. O.T.R. or eligible for degree, 1 yr. experience in O.T.	a. Sept., July b. As above c. Sept., Feb.	a. 4 acad. yrs. plus 9 mos. plus 9 mos. chinteal a failations b. 1 acad. yr. plus 9 mos. clinical affiliations c. 1 acad. yr.	Yes	Yes	126
Texas, University of Medical Branch	Miss Rose Marie Wells, O.T.R. Director of Occupational Therapy, University of Texas, Medical Branch, Galveston, Texas	\$50/acad. year \$300 for out- of-state residents \$25 clinical affiliations	Advanced Standing (Certificate)	College degree	Sept.	1 acad. yr. plus 9 mos. clinical affiliations	Yes	Yes	
Texas State College for Women	Assoc. Prof. Fanny B. Vanderkool, O.T.R. Director Occupational Therapy Department Texas State College for Women Denton, Texas	a. \$50/acad. year \$150 for out- of state students b. As above	a. Degree (B.S. or B.A. with major in OT) b. Advanced Standing (Certificate)	a. As for the College b. College degree	a. Sept., Feb.	a. 4 acad. yrs. plus 9 mos. clinical affiliations b. 9 mos. on campus, 9 mos. clinical affiliations	No	Yes	16
Washington University School of Medicine	Asst. Prof. Erna L. Simek, O.T.R. Director, Department of Cocupational Therapy Washington University School of Medicine 4587 Scott Avenue St Louis 10, Missouri	a. \$600/acad. year \$100 clinical affiliations b. As above	a. Degree (B.S. in O.T.) b. Advanced Standing (Certificate)	a. 60 semesters college credits, 36 of which are in required subjects b. College degree	a. Sept.	a. 2 acad yrs. plus 10 mos. clinical affiliations b. 1 acad. yr. plus 10 mos. clinical affiliations	Yes	Yes	76
Wayne University College of Liberal Arts and College of Education	Asst. Frof. Barbara Jewett, O.T.R., Director of Octupational Therapy, Detroit Memorial Hospital, 1429 St. Antoine, Detroit 36, Michigan.	a. \$220/acad. \$420 for out- \$420 for out- of-state students \$110 clinical affiliations \$210 for out-of-state students b. As above	a. Degree (B.S. in O.T.) b. Advanced Standing (Certificate)	a. As for the University *b. College degree	a. Sept., Feb., June b. As above	a. 4 acad, yrs. plus 10 mos. clinical affiliations b. 1 acad, yr. plus 10 mos. clinical affiliations	Yes	Yes	8

Name of School Name and Address of Director	Tuition	Type of Course	Requirements Entrance	Classes	Course	M	A J	Enrollment
scondin University of Asst. Prof. Caroline G. Thompson, ichool of Medicine O.T.R. Director of Occupational Therapy, University of Wisconsin, 1300 University Avenue, Madison 6, Wisconsin	on, \$180/acad. al year in, \$500 for out- of-state students	Degree (B.B. in O.T.) from School of Education plus Cer- tificate from School of Medicine	As for the University	Sept, Feb., June	4 acad, years, plus 10 mos. clinical affiliations	Yes	Yes	041

	Sept., Feb.
tablished by the Council on cerediting of any course must it to publication of this listing	As for the University; qualified transfer student
he essentials est al Association. A langed subsequer	Degree (B.S. in O.T.)
urses based on t American Medic therefore have ch	\$90/acad. year \$150 for out- of-state residents
The following school has developed courses based on the essentials established by the Council on Medical Education and Hospitals of the American Medical Association. Accrediting of any course must await a period of probation. Status may therefore have changed subsequent to publication of this listing	Asst. Prof. Aithea Ashton, O.T.R. Director of Occupational Therapy Department, University of North Dakota, Grand Forks, North Dakota
	Dakota, sity of

A postgraduate cerebral palsy course will be offered by Columbia University, College of Physicians and Surgeons, to occupational, physical and speech therapists, and nurses with the proper qualifications and experience in the field of rehabilitation. The nine weeks course will be offered from April 16 to June 15, 1956.

For further information write:

Office of the Dean Columbia University College of Physicians and Surgeons 630 W. 168th Street New York 32, N. Y.

The physical education department, division of recreation leadership, of the University of Minnesota in cooperation with the correspondence study department announces a new correspondence course to acquaint hospital personnel with recreation programs and principles as are offered for patients in hospitals. For details about the course write:

Correspondence Study Department University of Minnesota 251 Nicholson Hall Minneapolis 14, Minnesota

STRIKE BACK!



AMERICAN CANCER SOCIETY

SCHOLARSHIP AWARD

The Flower Guild of Los Angeles, California, is awarding one \$1500 scholarship for graduate study toward the degree of Master of Arts in Occupational Therapy at the University of Southern California during the academic year 1956-57. This is to be an award of merit and the recipient will be judged on present professional achievement, anticipated contribution to the profession, and the possibilities of personal and professional growth.

For application blanks write:

additional

Miss A. Jean Ayres, O.T.R. Coordinator, Graduate Program Occupational Therapy Department University of Southern California Los Angeles 7, California

MEDICAL SPECIALIST CORPS

The Surgeon General of the United States Air Force has announced that the former Women's Medical Specialist Corps has been redesignated the Medical Specialist Corps. Whereas commissions in the fields of occupational and physical therapy and hospital dietetics were previously restricted to women, appointments in the Reserve component are now open to men who are fully qualified in these professions.

POSTGRADUATE COURSE

Baylor University College of Medicine, Southwestern Poliomyelitis Respiratory Center and Jefferson Davis Hospital in cooperation with the National Foundation for Infantile Paralysis, Inc., announce a postgraduate course on the clinical management of poliomyelitis to be held February 27, 28, 29 and March 1 and 2, 1956.

The course will cover complete care of poliomyelitis with emphasis on the severely involved patient, the effective coordination of ancillary services and the value of comprehensive care.

For further details write:

William A. Spencer, M.D., Medical Director Southwestern Poliomyelitis Respiratory Center Jefferson Davis Hospital 1801 Buffalo Drive Houston 3, Texas

CLASSIFIED ADVERTISING

Classified advertising accepted for POSITIONS WANTED and POSITIONS AVAILABLE only. Minimum rate \$3.00 for 3 lines; each additional word ten cents. (Average 56 spaces per line). Copy deadline first of each month previous to publication.

POSITIONS AVAILABLE

Immediate opening for director of occupational therapy department. Salary open. Pleasant surroundings and working conditions. OT dept. now operating in the New Norfolk State Hospital Administration Building, with spacious quarters, new and modern equipment. Contact Dr. C. G. Ingham, Supt., Norfolk State Hospital, Norfolk, Nebraska.

Occupational therapist with at least one year's experience for position at children's medical center. Exceptionally well equipped department, growing in-patient and out-patient treatment programs with a variety of diagnoses. Developing student training program. Salary open, position available February or March of 1956. Write to Paul C. Benton, M.D., Medical Director, Children's Medical Center, Box 4014, Tulsa, Oklahoma.

Fairfield State Hospital, Newtown, Conn. Positions available, occupational therapists and senior therapists; 40-hour week; new clinical units; three-weeks vacation; liberal sick leave and holidays; close proximity to urban communities.

Qualified staff occupational therapist in out-patient rehabilitation center serving Westchester County. Salary commensurate with experience. Contact Eugene Moskowitz, M.D., Director, Mobility, Inc., 10 Heatherbloom Road, White Plains, New York.

Staff occupational therapist wanted at Utah State Hospital, Provo, Utah. This is a position in a relatively new and expanding rehabilitation service in a psychiatric hospital. Working conditions are good and time-off provisions are liberal. Salary \$3,900 per year. Applicants must be registered or eligible for registration. Experience beyond training is desired but not mandatory. Please direct inquiry to Personnel Director, Utah State Hospital, Provo, Utah.

Wanted immediately: registered occupational therapist for general physical medicine, reliabilitation in out-patient center. Five-day week, three weeks paid vacation, six holidays, sick leave, social security. Salary dependent upon experience. Write to: Gloria J. Fitzpatrick, R.P.T., Director, Ingham County Curative Workshop, 615 N. Capitol, Lansing, Michigan.

Staff position open for registered occupational therapist. Salary open. Pleasant surroundings and working conditions. Contact Dr. C. G. Ingham, Superintendent, Norfolk State Hospital, Norfolk, Nebr.

OT to establish department in new center. CP patients now, general rehabilitation in future. Salary and personnel policies above average. Contact Christine K. Kline, 209 W. Woodland Avenue, Youngstown, Ohio.

Highland View Hospital offers several attractive positions for staff and supervisory occupational therapists. Positions available include clinic treatment and sheltered workshop appointments as either practicing therapists or on a research team directed toward investigating the vocational potentials of the chronically disabled patient. Salaries open. For further information please write Mr. R. J. McCauley, Director of Occupational Therapy, Highland View, Cuyahoga County Hospital, Cleveland 22, Ohio.

Wanted immediately: staff occupational therapist for county tuberculosis hospital. Bed capacity 300 adults, 15 children. Opportunity to work both in shop and on ward, and with occupational therapy students. Salary ranges \$300 to \$360 plus laundry. Liberal vacation and retirement, excellent working conditions. Contact Mrs. Nancy Prendergast, O.T.R., Occupational Therapy Department, Benjamin Franklin Hospital, Columbus 7, Ohio.

Occupational therapist, full-time. Minimum salary \$4000. Case load muscular dystrophy and cerebral palsy. Community Rehabilitation Clinic, Mrs. Katherine Pelanda, Administrator, 614 Dartmouth Avenue, SW, Canton, Ohio.

Wanted: occupational therapist to head department in small neuropsychiatric hospital affiliated with medical school. Good salary. Mr. E. Johnson, Graylyn, Winston-Salem, N. C.

Summer camp positions: occupational therapists needed for camps for crippled children—June 23-August 22. Address replies to: The Pennsylvania Society for Crippled Children and Adults, Inc., 1107 North Front Street, Harrisburg, Pennsylvania.

Immediate opening for occupational therapist. Outpatient clinic. All ages and types patients. Excellent working conditions. Write Mrs. Audrey C. Lester, Director, 300 Royal Palm Way, Palm Beach, Florida.

Therapist (O.T.R.) for chronic hospital and aged home. Experienced. Ability to train and direct volunteers in craft work. Salary \$3,000 to \$3,600 and full maintenance, if desired. Write Levindale Hebrew Home and Infirmary, Baltimore 15, Maryland.

Wanted immediately: registered occupational therapist preferably with training work shop experience for directing and expanding new facility for the adult retardate. Salary commensurate with experience. Contact Mrs. Ruth Wettheimer, O.T.R., 50 Putnam Park, Greenwich, Connecticut.

Registered occupational therapist—age 30 to 50. Male or female. Pay range \$275.00 to \$485.00 depending on qualifications. Mental hospital experience desired. Richmond State Hospital, Richmond, Ind.

Do OT's exist? This hospital has unusual advantages to offer members of this vanishing species—a liberal, OT-minded administration; new occupational therapy building, fully equipped, but not fully staffed; new living quarters; large student training program, wide range of craft supplies and activities; salary open and interesting; only \$316 per year for complete maintenance. Vital statistics—state; psychiatric; 3,000 bed; center of Connecticut; 40 hour week; vacation, sicktime, health and insurance plans as usual; 11 holidays; retirement plan; average patient stay—3 months; hospital one of first three to be accredited by A.P.A. Central Inspection Board in 1954. Are you interested? Contact Mrs. Alice Rogers, O.T.R., Connecticut State Hospital, Middletown, Conn.

Immediate opening for a senior therapist in a new private psychiatric unit within an acute general hospital. Excellent opportunity for the right person. Psychiatric experience preferred. Salary open. Please contact Mrs. Mary Daly, O.T.R., Chief Occupational Therapist, St. Vincent's Hospital, 11th St. & 7th Avenue, New York 11, N. Y.

A registered occupational therapist is wanted for immediate placement at a rehabilitation center, in addition to the present staff. This is a five-day, forty-hour week out patient center. Write direct to Miss Esther W. Klein, Director, Portsmouth Rehabilitation Center, Portsmouth, New Hampshire.

Occupational therapist, female, young. Recent graduate preferred. One-person position in expanding physical medicine and rehabilitation department under full-time physiatrist in general voluntary 376 bed teaching hospital. Salaries in line with AOTA, include (1) meal while on duty, part payment Blue Cross and pension, (3) weeks vacation. Full maintenance available on premises. Apply Mrs. Theresa Selcoe, Personnel Director, The Mountainside Hospital, Montclair, N. J.

Connecticut—occupational therapist, or senior occupational therapist to head department in 260 bed accredited hospital. Excellent working conditions. Maintenance available at low cost. Near New Haven and New York. For details write Dr. Frederick C. Warring, Jr., Assistant Superintendent, Laurel Heights Tuberculosis Sanatorium, Shelton, Connecticut.

Occupational therapy director—salary \$4,320. Medical care, laundry, vacation and sick leave, retirement plan, full maintenance at nominal cost. Located in historic Williamsburg. Apply Personnel Office, Eastern State Hospital, Williamsburg, Va.

Staff therapist for active department in new 100 bed psychiatric teaching hospital in University Medical Center. Educational opportunities; modern, well-equipped, air-conditioned department. Write Betty M. Bishop, O.T.R., Activities Therapy Dept., Renard Hospital, 600 So. Kingshighway, St. Louis 10, Mo.

Cincinnati General Hospital has two challenging positions open: (1) Director of occupational therapy in a dynamically oriented psychiatric program affiliated with the College of Medicine of the University of Cincinnati. Unlimited possibilities for professional growth, pleasant shop set-up, well-integrated medical team, in-patient outpatient service. (2) Staff therapist for both psychiatric and non-psychiatric areas of hospital. Salaries open; civil service benefits; paid vacations. Contact Dr. Philip Piker, Associate Director of Psychiatry, Cincinnati General Hospital, Cincinnati, 29, Ohio.

Occupational therapist for well-equipped woodshop in psychiatric hospital. Experienced. Registration not necessary. Apply Mrs. Louise Breckenridge, Activities Director, Lincoln State Hospital, Lincoln, Nebr.

Wanted: occupational therapists, men and women, for a fully approved, large psychiatric hospital located in New England—midway between New York and Boston. Brand new building about to be opened, "The building of Tomorrow." New and modern equipment, dynamic all inclusive treatment program for patients. Large student affiliations with excellent educational program. Modern home, maintenance optional. Liberal retirement plan and illness policy. Paid vacations and holidays, automatic increments. Rotating services which offer professional growth. Immediate appointments. Write: Harry Kromer, O.T.R., Norwich State Hospital, Norwich, Connecticut.

Wanted immediately—temporary experienced staff therapist six months to a year to work in rehabilitation on respirator unit in Massachusetts General Hospital, Boston, Mass. Salary commensurate with experience and qualifications. 40 hr. week, paid vacations, sick leave. Contact Dr. A. L. Watkins, Physical Medicine Dept.

Good opportunities in Illinois TB hospitals for OT's with or without experience. Minimum starting range 4000 to 4140. Illinois TB Association, 730 S. 6th Street, Springfield, Illinois.

Occupational therapist in private psychiatric hospital (O.T.R.). Work includes recreation and entertainment as well as the occupational therapy program for both women and men. Maintenance is provided. Salary is open. Apply to Clifford D. Moore, M.D., Medical Director, Stamford Hall, Stamford, Connecticut.

Staff position open for O.T.R., Sheppard-Pratt Hospital, Towson 4, Maryland. Write Mrs. Marshall L. Price, O.T. Director.

Occupational therapist, registered staff or senior therapist's level, salary \$275.00 to \$485.00, minus \$25.00 for full maintenance. This department is in the process of reorganizing along contemporary and therapeutic lines. Anticipate an increase in staff and expansion of the occupational therapy program. State mental hospital, patient population of 2,500. Apply Ralph B. Cary, Personnel Officer, Logansport State Hospital, Logansport, Ind.

Organize department—opening for O.T.R. in state mental hospital having excellent physical facilities for OT. Agreeable climate. Good public relations and employee morale. 40-hour week; paid sick leave and vacation. Beginning salary \$3840 with annual increments. Maintenance available at very low cost for single person or couple without children. Write: Personnel Office, Western State Hospital, Hopkinsville, Ky.

Staff therapists—Westchester County; \$3550 to \$4240 in three years; complete professional supervision; progressive personnel practices; contact Personnel Office, County Office Building, White Plains, New York.

Immediate openings for O.T.R.'s for a rapidly expanding physical medicine and rehabilitation service. Sheltered workshop, ADL and kinetic treatment program for adults. Team methods and conferences, integrated program. Affiliated with the New York Medical College. Salary \$3750, with eligibility for New York City civil service status. 25 days paid vacation, 12 days sick leave and 14 days legal and religious holidays annually. Contact: Judith M. Fuller, O.T.R., Physical Medicine and Rehabilitation Department, Bird S. Coler Hospital, Welfare Island, New York.

O.T.R.—Rehabilitation Services, Binghampton, N. Y., position available immediately. Salary open, well fitted medically supervised OT clinic. For further information write Ward A. Merrell, Administrator, Rehabilitation Services, Inc., 200 Court Street, Binghamton, New York.

Urgently required: One senior assistant occupational therapist (Salary range—\$3,000.00-\$3,600.00 per annum); two general duty therapists (salary range— \$2,520.00-\$3,000.00 per annum). Required by Department of Rehabilitation Medicine, University Hospital, Saskatoon, Saskatchewan, Canada. To carry out occupational therapy in a comprehensive rehabilitation program for the physically handicapped, and psychiatric patients on a diagnostic ward. For application forms and further information write to: Dr. T. E. Hunt, Director of Rehabilitation Medicine, University Hospital, Saskatoon, Saskatchewan, Canada.

Opening for O.T.R. in out-patient rehabilitation clinic available immediately; department already established. Salary range \$3980.40-\$4622.40; yearly increment \$128.40; 35-hour week; hospitalization; pension; vacation 1 day month plus compensatory time; 1 day month sick leave. Write Dr. I. D. McLaren, Commissioner of Health, Cattaraugus County Department of Health, Olean, New York.

Registered occupational therapists needed for orthopedic and pediatric positions. Responsible for patient treatment and supervision of student affiliates. Facilities excellent. Three weeks vacation, many benefits. For information write Personnel, Michael Reese Hospital, 29th and South Ellis Ave., Chicago, Illinois.

Trained occupational therapist wanted for full-time position in private mental hospital. Census 70 pts. Progressive psychiatric program. Address: Heide F. Bernard, Administrator, Hall-Brooke, Greens Farms, Conn.

Occupational therapist-6 needed for new Lafayette Clinic in Detroit, Michigan; 3 more vacancies within 20 miles of Detroit. Salaries from approximately \$4,000 to \$7,000 yearly depending upon qualifications. Holiday, vacation, sick leave, etc. Write Michigan Civil Service, Lansing 13, Michigan.

Immediate opening for registered occupational therapist with training and/or experience in cerebral palsy. Salary range \$3480.00 to \$4550.00, depending upon experience and training. United Cerebral Palsy Assoc., 1612 Southwest First St., Miami 35, Fla.

Wanted: Supervising occupational therapist, male or female, for department of rehabilitation in university teaching hospital. Good salary. Write Harold N. Neu, M.D., Director of Rehabilitation, Creighton Memorial St. Joseph's Hospital, Omaha, Nebraska.

Leap year takes its toll. Immediate openings for director and staff therapists for state psychiatric acute, training, research, and intensive treatment hospital. 200 adult beds, 25 children's beds. Salaries commensurate with experience. Social security, pension plan, fortyhour week, two weeks vacation a year, two weeks sick leave a year. Contact Donald F. Moore, M.D., Medical Director, Larue D. Carter Memorial Hospital, 1315 West Tenth Street, Indianapolis 7, Indiana.

Occupational therapist for occupational therapy and rehabilitation program in county tuberculosis hospital. Clinical training affiliations. Vacation and sick leave with pay, maintenance optional, forty hour week. Write Director of Occupational Therapy, Sunny Acres Hospital, Cleveland 22, Ohio.

Wanted immediately: staff therapist for workshop program in cerebral palsy center for teenagers and adults. Salary \$3600 or more, depending upon experience. Five day week and paid holidays, including two weeks at Christmas and one month vacation, plus paid sick leave. Opportunity for post-graduate training in the field of cerebral palsy under scholarship. For further informa-tion contact the director, Mrs. Victor Warken, 523 E. Walnut St., Columbus 15, Ohio.

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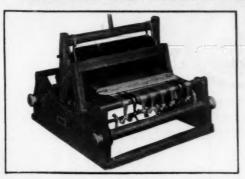
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